

*What's really happening to prices*

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# BUSINESS WEEK

A MCGRAW-HILL PUBLICATION

FIFTY CENTS

MAY 17, 1958

At Westinghouse, committee management means three men to plan and Mark Cresap to run the show.  
(Management)

E. B. POWER  
UNIVERSITY MICROFILMS  
315 W 1ST ST  
ANN ARBOR MICH  
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## Tomorrow's "dream" is our job today!

There's *more* to the car of tomorrow than just futuristic styling! Automotive engineers are working to perfect completely new power plants — like turbine engines — to achieve yet-unheard-of performance and economy! And they demand bearings that are as advanced as their thinking. ☆ This is no new challenge to Bower engineers. A glance at the design features listed at right will tell you a *few* of the many original Bower contributions to bearing performance which have reduced bearing maintenance and failure to a practical minimum. There are many more in the making. ☆ If your product is one which needs advanced bearings *today* plus realistic planning for the future, specify Bower. There's a complete line of tapered, straight and journal roller bearings for every field of transportation and industry.

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FEDERAL-MOGUL-BOWER BEARINGS, INC. • DETROIT 14, MICHIGAN



**ADVANCED SPHER-O-HONED DESIGN  
REDUCES WEAR**

*Spherically generated roll heads • Higher flange with larger two-zone contact • Larger oil groove • Honed races.*



# BOWER

**ROLLER BEARINGS**



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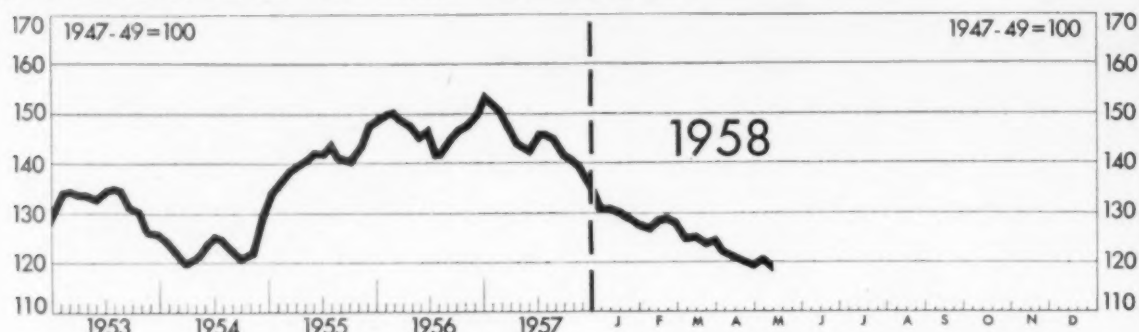
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## BUSINESS WEEK INDEX (chart)

1946 Average	Year Ago	Month Ago	Week Ago	% Latest Week
91.6	143.3	121.7	†121.2	*119.8

### PRODUCTION

Steel ingot (thous. of tons).....	1,281	2,155	1,285	†1,334	1,400
Automobiles and trucks.....	62,880	160,100	110,663	†105,776	104,453
Engineering const. awards (Eng. News-Rec. 4-wk daily av. in thous.).....	\$17,083	\$69,106	\$67,950	\$62,350	\$67,805
Electric power (millions of kilowatt-hours).....	4,238	11,311	11,307	11,251	11,315
Crude oil and condensate (daily av., thous. of bbls.).....	4,751	7,434	6,187	6,227	6,220
Bituminous coal (daily av., thous. of tons).....	1,745	1,585	1,170	†1,120	1,058
Paperboard (tons).....	167,269	291,074	256,970	246,385	264,699

### TRADE

Carloadings: mfrs., miscellaneous and l.c.l. (daily av., thous. of cars).....	82	68	54	55	56
Carloadings: all others (daily av., thous. of cars).....	53	52	35	33	33
Department store sales index (1947-49 = 100, not seasonally adjusted).....	90	143	134	136	132
Business failures (Dun & Bradstreet, number).....	22	267	342	336	279

### PRICES

Spot commodities, daily index (Moody's, Dec. 31, 1931 = 100).....	311.9	408.5	394.7	391.8	398.6
Industrial raw materials, daily index (BLS, 1947-49 = 100).....	††73.2	92.5	80.8	80.3	80.9
Foodstuffs, daily index (BLS, 1947-49 = 100).....	††75.4	81.6	90.1	90.1	91.2
Print cloth (spot and nearby, yd.).....	17.5¢	17.8¢	17.2¢	17.2¢	17.2¢
Finished steel, index (BLS, 1947-49 = 100).....	††76.4	174.4	181.6	181.6	181.6
Scrap steel composite (Iron Age, ton).....	\$20.27	\$45.83	\$32.83	\$32.00	\$32.67
Copper (electrolytic, delivered price, E & M, lb.).....	14.045¢	31.430¢	24.835¢	24.795¢	24.655¢
Wheat (No. 2, hard and dark hard winter, Kansas City, bu.).....	\$1.97	\$2.23	\$2.30	\$2.25	\$2.25
Cotton, daily price (middling, 1 in., 14 designated markets, lb.).....	**30.56¢	33.86¢	34.58¢	34.66¢	34.71¢
Wool tops (Boston, lb.).....	\$1.51	\$2.18	\$1.65	\$1.60	#

### FINANCE

500 stocks composite, price index (S&P's, 1941-43 = 10).....	17.08	46.67	41.99	43.79	43.70
Medium grade corporate bond yield (Baa issues, Moody's).....	3.05%	4.52%	4.66%	4.64%	4.63%
Prime commercial paper, 4 to 6 months, N. Y. City (prevailing rate).....	¾-1%	3% %	2%	1¾ %	1¾ %

### BANKING (Millions of Dollars)

Demand deposits adjusted, reporting member banks.....	††45,820	55,273	55,251	†55,699	54,915
Total loans and investments, reporting member banks.....	††71,916	86,087	89,834	†92,483	91,973
Commercial and agricultural loans, reporting member banks.....	††9,299	31,338	30,668	†30,185	30,129
U. S. gov't guaranteed obligations held, reporting member banks.....	††49,879	25,552	28,055	30,548	30,496
Total federal reserve credit outstanding.....	23,888	25,177	24,638	24,566	24,763

### MONTHLY FIGURES OF THE WEEK

	1946 Average	Year Ago	Month Ago	Latest Month	
Personal income (seasonally adjusted, in billions).....	April.....	\$178.0	\$341.1	\$342.2	\$342.8
Farm income (seasonally adjusted, in billions).....	April.....	\$16.9	\$15.8	\$16.8	\$17.0
Average weekly earnings in manufacturing.....	April.....	\$43.82	\$81.59	\$81.45	\$80.81
Wholesale prices (U. S. Dept. of Labor BLS, 1947-49 = 100).....	April.....	78.7	117.2	119.7	119.4
Retail sales (seasonally adjusted, in millions).....	April.....	\$8,541	\$16,437	\$16,093	\$16,379
Housing starts (in thousands).....	April.....	55.9	93.7	79.0	95.0
Exports (in millions).....	March.....	\$812	\$2,151	\$1,345	\$1,557

\* Preliminary, week ended May 10, 1958.  
† Revised.

†† Estimate.  
\*\* Ten designated markets, middling 11 in.

# Date for 'Latest Week' on each series on request.  
\* Insufficient trading to establish a price.

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## THE KIND OF CORPORATE TRUST COUNSEL THAT REACHES MRS. MAYWOOD

Good shareholder relations result from many things—including accurate, prompt communications; understanding replies to inquiries; successful annual meetings. Our Corporate Agency people have earned a reputation for competence because they know the importance of the human side of their work—whether cooperating at annual meetings, handling stock subscriptions, exchanges or splits, tabulating proxies, or going to unusual lengths to deliver unclaimed dividend checks. Ask your local banker about our Corporate Trust services—or write to us at 16 Wall Street, New York 15, N. Y.



**BANKERS TRUST COMPANY, NEW YORK**

**FORWARD-LOOKING BUSINESS  
NEEDS A FORWARD-LOOKING BANK**

MEMBER F.D.I.C.



Imagine an insurance company helping you bake an apple pie!

# Wausau Story



by **LOUISE WILSON**, Woman's Editor,  
Radio Station WHAM, Rochester, New York

"I treasure an old cook book that tells how to prepare a rabbit stew. First step: 'Catch the rabbit'.

"So 'Get the apples' is the first direction for baking an apple pie. That's easy, thanks to the canning industry. I was reminded of that when we visited a Comstock Foods Incorporated plant at Red Creek. There we watched them can apples for pies . . . saw how they are peeled and cored by machines . . . trimmed by hand . . . carefully inspected . . . then cooked to juicy tenderness. Even the spices are added! Now an apple pie doesn't take much work . . . or much out of the budget either.

"And that's where Employers Mutuals of Wausau plays a part. Canners work on a close profit margin. Savings they pass on to us have to come from some place. And Employers Mutuals helps canners build substantial savings on their insurance. How? By helping promote safety in the plants . . . by working with the canners and using the experience gained in canning factories all over the country. It works! Mr. Comstock will tell you this. And you'll see why Employers Mutuals are called 'good people to do business with'."



**Richard Comstock**, President of Comstock Foods Incorporated, goes over the figures with Employers Mutuals' Dewey Hubbard (right). In a ten-year period, the savings have equalled the profits on close to eight million cans of food. A real savings! "These people understand the canning business," says Mr. Comstock. "That's why our experience with Employers Mutuals has been so pleasant and our savings so substantial."



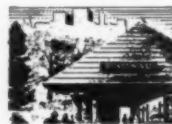
**Smells good:** a secret blend of spices! Art Crowell (right) knows how to mix them. Dewey Hubbard may not know the recipe but, like all the men from Employers Mutuals of Wausau, he's well acquainted with the over-all operation of a canning plant. That's why he's able to serve the industry and help make the big savings.



**50 apples a minute** can be peeled by machines like this one operated by Lorna Barber. There's no time to waste when the apples come in. Workers and machines are ready . . . and Employers Mutuals' men help "peak up" the safety program too. They've had experience in this. In Wisconsin alone Employers Mutuals carries the insurance on more than 75% of all the canning factories.

.....  
*Employers Mutuals, with offices all across the country, writes all forms of fire, group and casualty insurance (including automobile). We are one of the largest in the field of workmen's compensation. For further information see your nearest representative (consult your telephone directory) or write us in Wausau, Wisconsin.*

## Employers Mutuals of Wausau



*"Good people to do business with"*



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**BUSINESS WEEK • May 17, 1958**

## READERS REPORT

### Education Report

Dear Sir:

Your Special Report on The Real Trouble with U. S. Education was a masterful piece of writing [BW—Apr. 19'58, p154]. Your staff writers have performed a highly objective piece of writing. In typical BUSINESS WEEK style you have dug to the roots of the problem instead of dealing with superficial criticism. It is a pleasure to read criticism straight from the shoulder, free from the emotionally charged adjectives used in some publications.

When the second article has been published, we will be writing for at least 1,000 copies of the reprints to use as a basis for discussion in community "town hall meetings" to be held in a thousand communities in Ohio. . . .

LEWIS E. HARRIS

EXECUTIVE SECRETARY  
 OHIO SCHOOL BOARDS ASSN.  
 COLUMBUS, OHIO

Dear Sir:

Congratulations on your superb educational series! It's certainly the most mature job that has been done so far. . . .

HENRY H. HUNTER

OLIN MATHIESON CHEMICAL CORP.  
 NEW YORK, N. Y.

Dear Sir:

The article in a recent issue of BUSINESS WEEK on the subject of American education is the most sensible and best balanced appraisal which I have seen anywhere. Unfortunately a good deal of intemperate and ill-informed writing is occurring on this subject at the present time. We know that in many cases statistics have been cited which are quite erroneous. All of these things tend to cause people in the field of education to defend the field as a whole, whereas we know that there are modifications which need to be made, and some of them at fairly basic points.

VIRGIL M. HANCHER

PRESIDENT  
 STATE UNIVERSITY OF IOWA  
 IOWA CITY, IOWA

Dear Sir:

. . . These articles have the great merit of breadth of view and they are particularly significant because they have pointed out the essentials of the subject. Those of us who have had children in high schools and have had to take them out and send them to private schools so that they might learn something are well



Elevator doors open automatically as car arrives



Doors stay fully opened as passengers enter



Doors never close prematurely to frighten passengers



Doors wait for last passenger to enter...then close immediately



**THE KOPPERS BUILDING  
IN PITTSBURGH, PENNA.,**

modernized its elevators which were installed in 1929 with Selectomatic *operatorless* elevators and Traffic Sentinel controlled doors. When in Pittsburgh, test ride these remarkably *smooth* Westinghouse elevators—and observe Traffic Sentinel in action.

**HOW "COURTEOUS" CAN AN ELEVATOR BE ?  
WESTINGHOUSE OPERATORLESS ELEVATORS  
WITH TRAFFIC SENTINEL® CONTROLLED DOORS  
PROVIDE AN AMAZING ANSWER**

When Koppers Company, Inc. decided to modernize its Westinghouse elevator system to cope with increasing building traffic demands, they again selected Westinghouse equipment for their 12 elevators. The modernization provided for the newest Westinghouse Selectomatic *operatorless* elevators, as well as electronically controlled Traffic Sentinel doors.

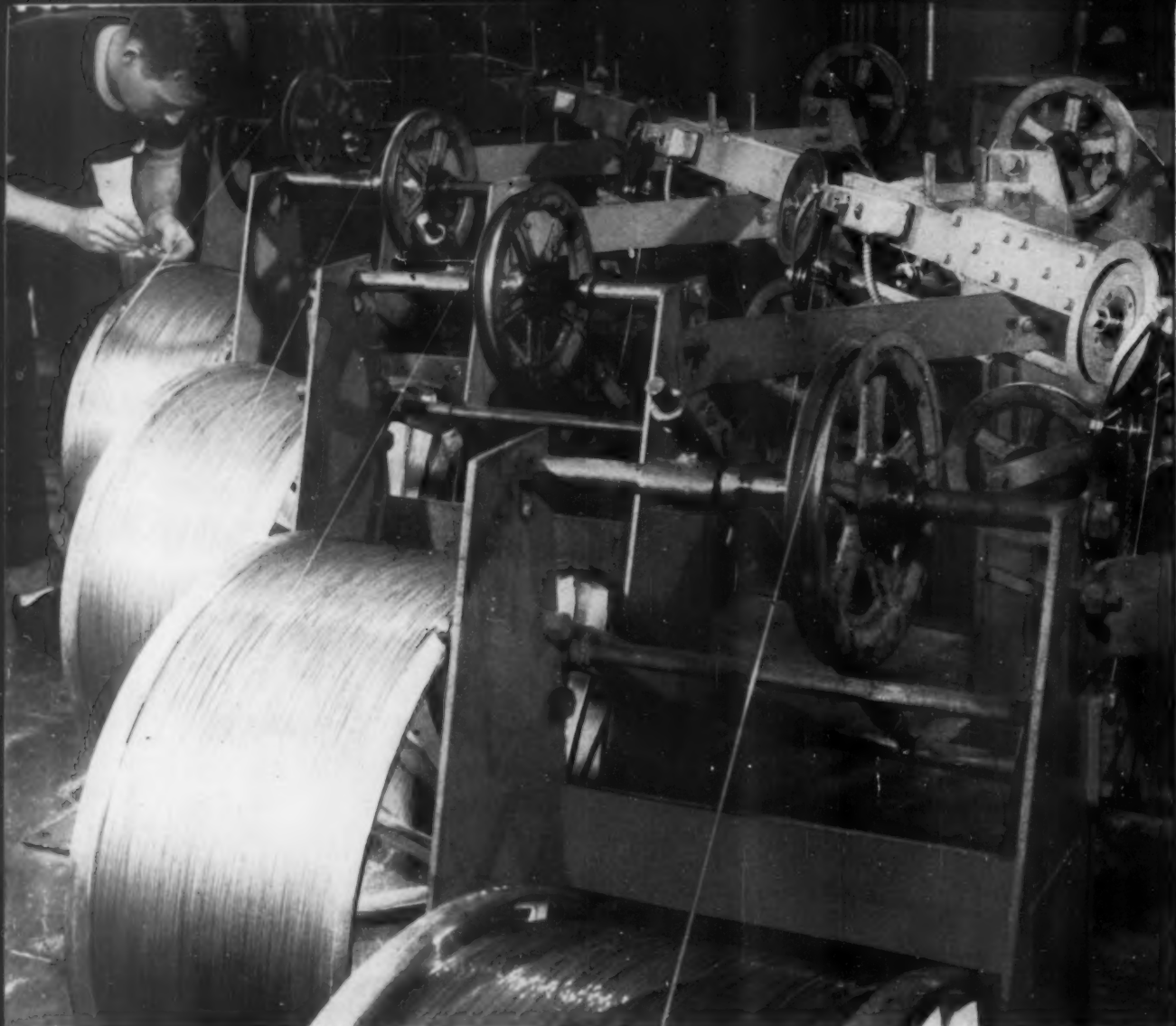
Why *operatorless* elevators?—because operating costs are cut as much as \$7,000 per car per year.

Why Traffic Sentinel Doors?—because these are the most courteous elevator doors in the world. They work *for* passengers, not against them. They never "snap" at or frighten people. Door opening and closing is controlled entirely by passenger movement. Doors remain open only as long as necessary—and close only when threshold is free and clear. It's all done electronically with Traffic Sentinel's "seeing eye."

If you're planning to modernize your present elevator system to meet today's heavier passenger traffic demands, the people to talk to are in your nearest Westinghouse Elevator Division office. They'll help you with any elevating problem relating to modernization or new building installations.

YOU CAN BE SURE...IF IT'S **Westinghouse**

**WESTINGHOUSE ELEVATORS AND ELECTRIC STAIRWAYS**



**Let-off equipment at Gates Rubber** is where Johnson Steel & Wire Company's tire bead wire proves out. Johnson's 1,000-pound coils give far

longer runs than the former coils of 400 to 600 pounds. And Johnson's uniform quality and packaging techniques insure trouble-free operation.

## Gates Cuts Tare Weights by 7½ Times With Johnson's New Bead Wire Spool

A unique history of success—founded on an unusual business philosophy—has been written during 47 years of business by The Gates Rubber Company of Denver.

From its beginning as a small leather shop in 1911, employing a single person, until the present when it is exceeded in size by only five other rubber manufacturers among 1,400 in the industry, Gates has restricted its production to what it calls "necessary accessories to an essential product."

Following this policy, Gates today is a leading supplier of industrial rub-

ber products, one of the largest producers of hose, the world's largest manufacturer of V-Belts, as well as a growing producer of tread rubber and top quality truck and passenger car tires.

In tire manufacturing, as in its production of other products, Gates follows this three-fold quality "code."

1. Get the latest, most efficient tire-making equipment and operate it in a clean, modern plant.
2. Insist on finest raw materials.
3. Establish rigid specifications—test to make sure specs are met—

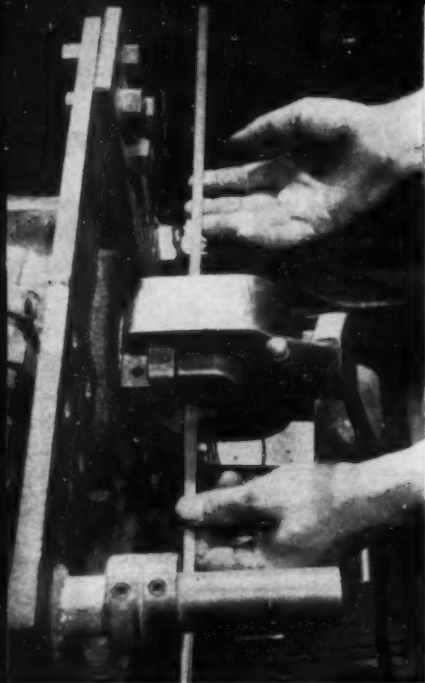
inspect products in process frequently to be certain of desired final quality.

It's on points 2 and 3 that Johnson Steel & Wire Company, Inc., comes into the Gates picture.

Johnson's tire bead wire meets all requirements of Gates' four major specifications: uniformity of tensile, gage, plating as well as cast.

Then—in meeting Gates' fifth specification (for packaging), Johnson goes a step further and ships its tire bead wire on the finest new spool-less core available in the bead wire industry.





**Here the actual beads are formed.** Thick, uniform bronze coatings on tire bead wire, plus required composition, result in perfectly formed, evenly spaced beads that are tightly adhesive.

In transit, the protection Johnson's new spool-less core gives bead wire is important, but equally so is another factor—savings in freight costs.

Gates is extra sensitive to shipping costs. By drastically reducing tare weight on reels of wire being shipped to Gates, and by fully eliminating return of empty reels, Johnson cuts tare weight to two pounds per hundred-weight.

Easily palletized for quick fork-truck handling, Johnson's bead wire on spool-less cores represents 7 to 7½ times less tare weight than old-style reels. Since there's no return of the flangeless cardboard cores, this expense is out entirely.

Once in the Gates plant, spool-less cores require less storage space. There is nearly 1,000 pounds of wire per coil.

The clean, unbroken surface of Johnson's tire bead wire, the required composition of the bronze plating on the correctly tensiled wire all mean that the miles of wire in a Gates bead will do the job it's designed for: giving strength equal to the overall quality of the tire.

The same assurance of quality wire and the latest in packaging technology that Gates gets are available from Johnson Steel no matter what your specialty wire needs.

Whether it's wire for brushes, aircraft, bobby pins, high-strength springs, textile cards, reinforced rubber hoses or tires—you can depend on Johnson. Call any of the sales offices listed here.



**Where tires get muscles.** Tire beads, each made of miles of Johnson Steel's tire bead wire, are shown here ready for delivery to the tire builder.

**On Bag-o-matic machines like these, tires are shaped and cured.** The Gates' battery of Bag-o-matics is one of the industry's largest and most modern.



## Johnson Steel & Wire Company, Inc.

Worcester 1, Massachusetts

**a subsidiary of Pittsburgh Steel Company**

Grant Building

Pittsburgh 30, Pa.



### District Sales Offices

Atlanta  
Chicago

Cleveland  
Dallas

Dayton  
Detroit  
Houston

Los Angeles  
New York  
Philadelphia

Pittsburgh  
Tulsa  
Warren, Ohio

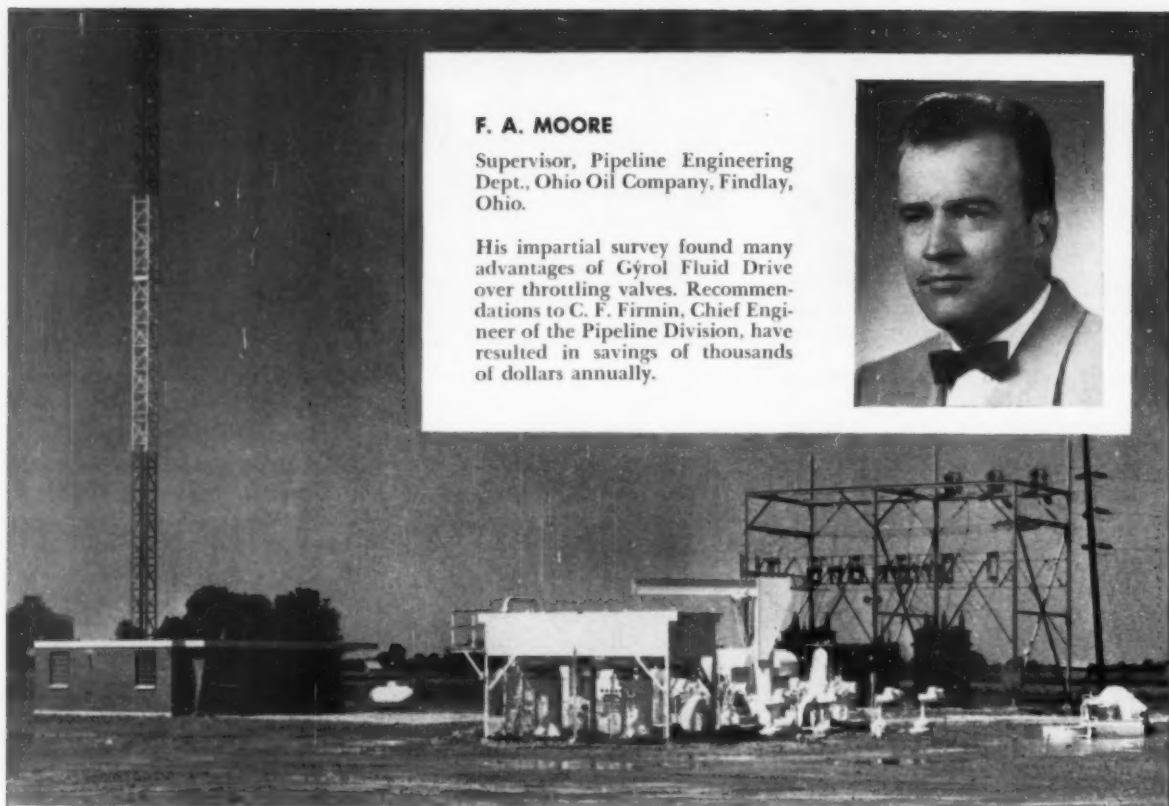


# AMERICAN BLOWER Gyrol Fluid Drive REDUCE PIPELINE

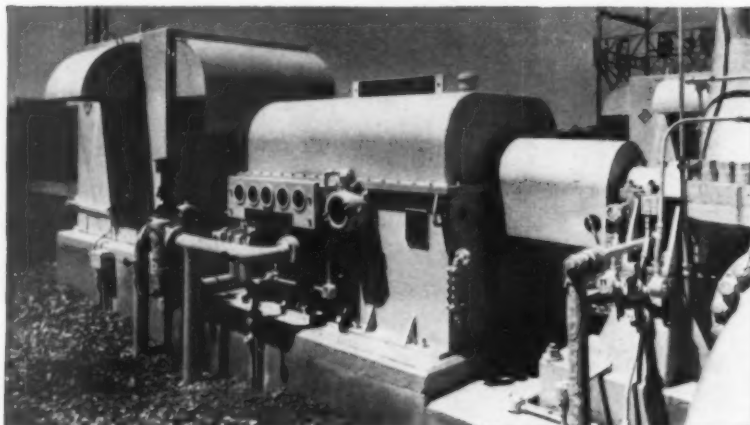
## F. A. MOORE

Supervisor, Pipeline Engineering  
Dept., Ohio Oil Company, Findlay,  
Ohio.

His impartial survey found many advantages of Gyrol Fluid Drive over throttling valves. Recommendations to C. F. Firmin, Chief Engineer of the Pipeline Division, have resulted in savings of thousands of dollars annually.

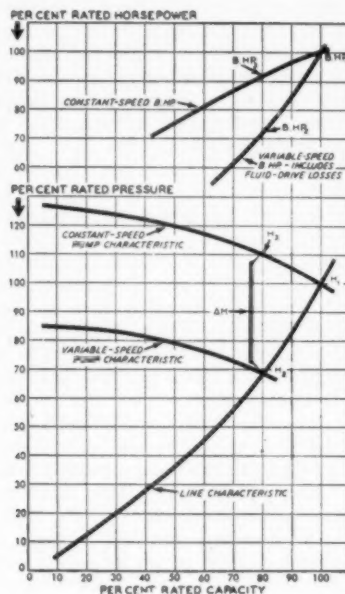


Ohio Oil's Roachdale, Ind., pumping station.



Gyrol Fluid Drive is installed outdoors at the Roachdale station, an automatic, unattended crude-oil booster station. The unit pictured consists of a 2,500-hp 1,800-rpm motor, a class 6 Gyrol Fluid Drive, and a centrifugal pump.

Graph shows how pump BHP varies as the cube of the speed, while Gyrol Fluid Drive efficiency varies directly as the ratio of output to input speed. Result: major power savings over throttling whenever pump runs below full speed.



helps Ohio Oil Company

# POWER COSTS 10%-25%!

**Adjustable-speed Gýrol Fluid Drive saves power;  
gives complete flexibility of flow and pressure**

Power savings of \$10,000-\$12,000 *annually* have resulted since Ohio Oil Company, Findlay, Ohio, equipped its Jewett, Ill., automatic pumping station with American Blower Gýrol Fluid Drive.

Infinitely adjustable in speed, Gýrol Fluid Drive controls flow and pressure in a 10-in. closed-system products line. By eliminating wasteful throttling, it maintains throughput with lowest possible power consumption.

An 8-stage centrifugal pump is driven by a 900-hp, 3,600-rpm induction motor through Gýrol Fluid Drive. This combination brings these operating benefits:

- Single unit provides complete flexibility, regardless of rate of flow required by changes in viscosity or specific gravity.

- Motor starts under no-load conditions, reducing "soft line" demand charges.

- Pressure surges in line are eliminated.

In addition, American Blower Gýrol Fluid Drive:

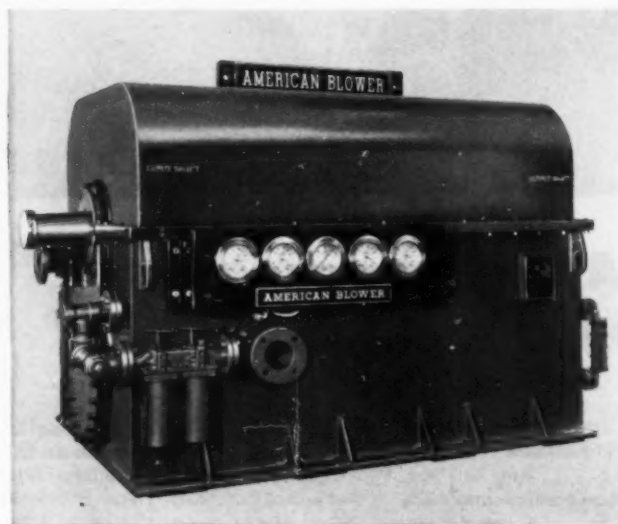
- Holds pressure below design pressure of line.

- Maintains minimum suction pressure.

- Adapts easily to unattended operation.

- Offers dependability proved by hundreds of continuous-duty pump applications.

For full information on the pipeline-pumping savings possible with Gýrol Fluid Drive, contact one of our 73 branch offices. Or write: American-Standard\*, American Blower Division, Detroit 32, Michigan. In Canada: Canadian Sirocco products, Windsor, Ontario.



\* American-Standard and Standard® are trademarks of American Radiator & Standard Sanitary Corporation.

Dependable Gýrol Fluid Drives have satisfied the automation needs of power plants for years; are ideal for remote-controlled pumping stations. Class 6 Gýrol Fluid Drives are available from 250 hp to 12,000 hp; speeds to 3,600 rpm.

Gýrol Fluid Drive Dept. 30  
American-Standard  
American Blower Division  
Detroit 32, Michigan

Gentlemen:

- ☐ Please send information on Gýrol Fluid Drive for pipeline pumping stations; ☐ Have an American Blower representative call.

Name \_\_\_\_\_

Title \_\_\_\_\_

Company \_\_\_\_\_

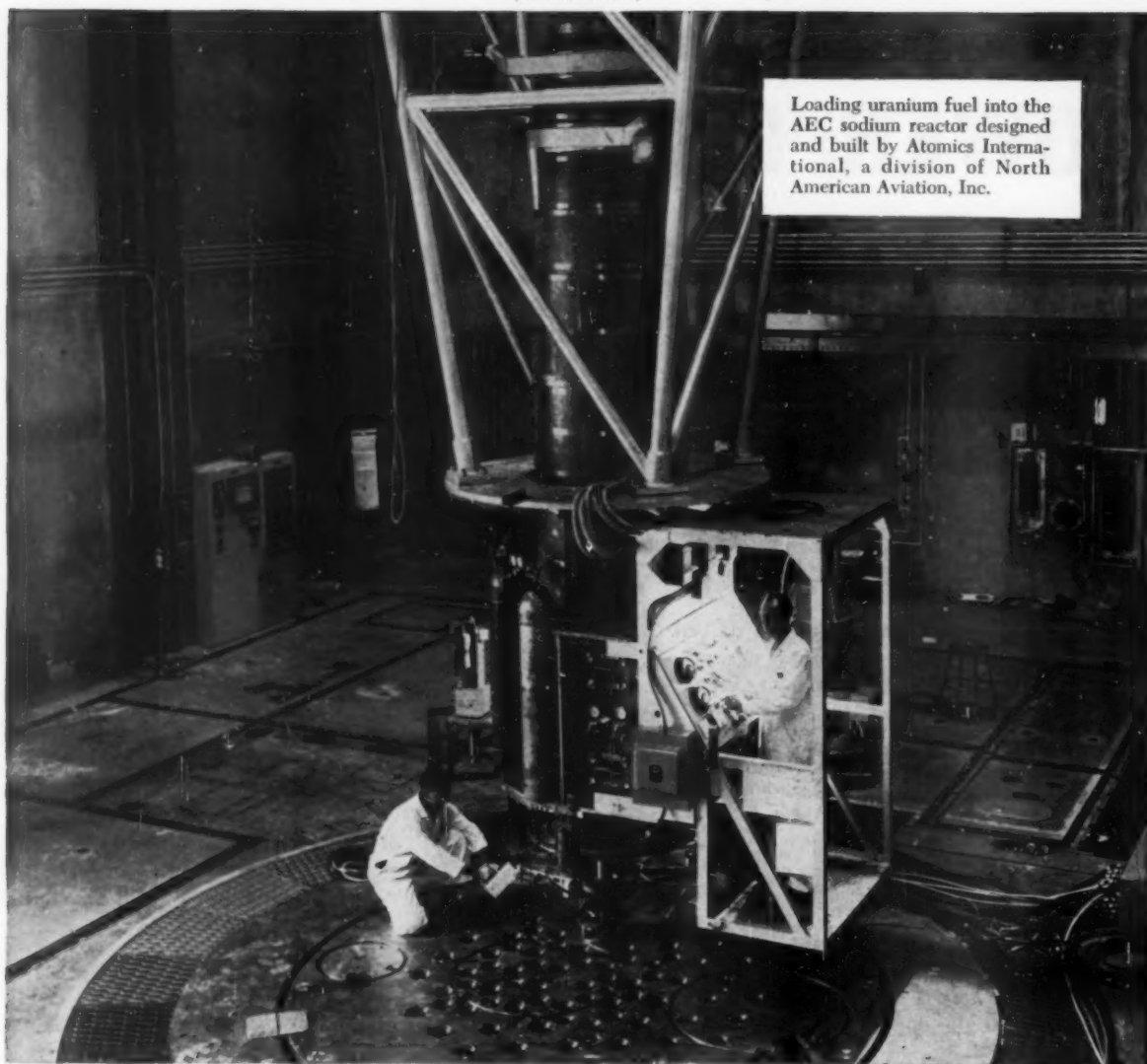
Address \_\_\_\_\_

City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_



**AMERICAN-Standard**  
AMERICAN BLOWER DIVISION

(Advertisement)



Loading uranium fuel into the AEC sodium reactor designed and built by Atomics International, a division of North American Aviation, Inc.

## **Water for new Atom Power Plant is 99.999992% pure!**

● Southern California Edison Co. . . . now generating current from this new reactor in the Santa Susana Mountains . . . is the first private utility to produce electricity from a non-military reactor.

As in any system using water or steam in or near an atomic reactor, the quality of the water at the Santa Susana plant is important. Suspended and dissolved mineral solids must be removed to prevent them from depositing in boiler tubes and turbines. In other types of reactors, these solids can also pick up and carry radioactivity and could

make turbines and other equipment difficult for maintenance or repair.

Although this plant's water supply is a clear well water, it contains almost 600 parts per million of hardness salts and other dissolved solids. The Permutit softener and demineralizer reduce these solids to 1/12 part per million . . . a purity of 99.999992%!

Permutit was chosen to design and supply this precise and critical equipment because of its long experience in water conditioning.

If your problem is Water . . . for industrial, municipal or home use, we'd like to discuss it with you. Address: The Permutit Company, Dept. BW-5, 50 West 44th St., New York 36, N. Y. or Permutit Company of Canada, Ltd., Toronto 1, Ontario.

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**PERMUTIT®**  
rhymes with "compute it"

a division of PFAUDLER PERMUTIT INC.

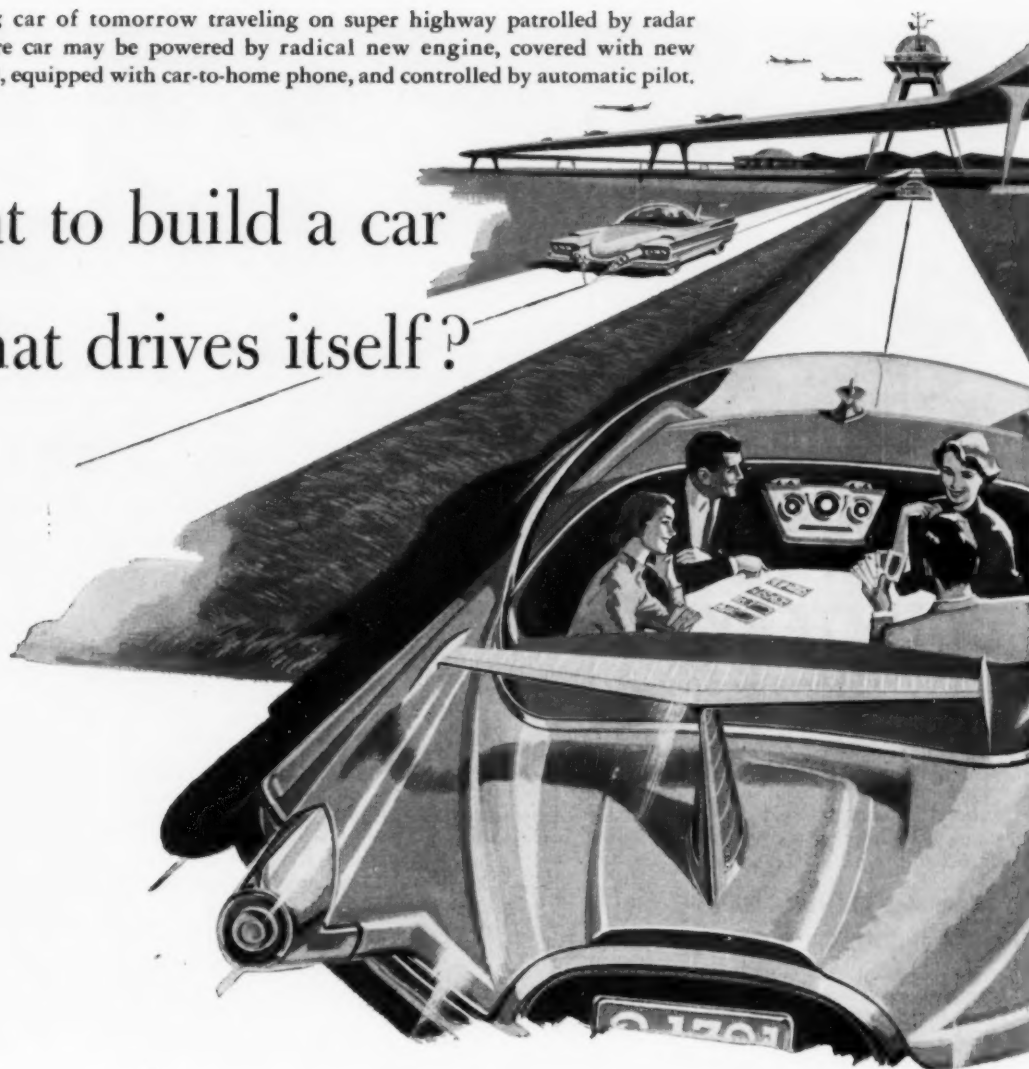
**Water Conditioning  
Ion Exchange • Industrial Waste Treatment**

---



**Self-steering** car of tomorrow traveling on super highway patrolled by radar towers. Future car may be powered by radical new engine, covered with new wonder metal, equipped with car-to-home phone, and controlled by automatic pilot.

## Want to build a car that drives itself?



**Thompson Products** can help you handle the job

**S**OME DAY—and it may come surprisingly soon—a car-maker will introduce a radically advanced new automobile, and cash in on the giant market of tomorrow. Thompson Products can help design and build important components for such a car *today*.

Right now Thompson can aid in creating self-steering devices, advanced new chassis and engines, uses for new wonder metals, and many other revolutionary features.

For years Thompson has been a

leader in the development of steering systems . . . in improvement of automotive and aircraft engines, of chassis and airframes . . . and has pioneered in high-temperature, corrosion-resistant metallurgy.

No matter what kind of product you want to make, chances are Thompson can help you—thanks to its vast experience which includes design and production of hydraulic, pneumatic and electronic components, assemblies and systems . . . and a great variety of

processes, from high-precision forging to impact extrusion and every kind of quality machining.

If you have a new product in mind, why not call for specific information on how Thompson can help you build it?

You can count on

**Thompson**  
**TP Products**

as a partner in solving the design and production problems of an advancing technology

General Offices, Cleveland 17, Ohio

From Thompson's 21 research centers and 25 manufacturing plants come, each year, important new advances in mechanics, electronics, hydraulics, pneumatics, aerodynamics, thermodynamics and nucleonics.



## Dependable Intercom with **BUILT-IN COURTESY**

Executone protects your privacy, never interrupts. Exclusive "Chime-Matic"® signalling announces all calls with a soft chime and signal light. Conversations are private and confidential, yet you can reply from across the room, if you wish.\*

### **Executone Gives You More Working Minutes Per Hour!**

- Information is exchanged instantly via Executone. Walking time becomes *working* time.
- Executone handles all *inside* calls — telephone lines are kept open for *outside* calls.
- Get information from other departments while "on the phone."

Installations in every type of business prove that Executone pays for itself many times over! Write for more information.

**Don't Walk... Talk!**

# Executone®

**INTERCOM AND SOUND SYSTEMS**

\*U. S. Pat. No. 2,744,906

EXECUTONE, INC. Dept. K-1.  
415 Lexington Ave., New York 17, N. Y.  
Without obligation, please let me have:

- ☐ The name of your local Distributor  
☐ Complete descriptive literature

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Firm \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

In Canada—331 Bartlett Ave., Toronto

aware of this situation, and it is very heartening to read in a publication like yours, with enormous coverage, so much good sense.

A. R. GORDON  
UNITED SHOE MACHINERY CORP.  
BOSTON, MASS.

Dear Sir:

Would like very much to tell 60,000 school superintendents and other educational leaders throughout country who receive NEA News each week about your Special Report on The Real Trouble with U. S. Education. May we have permission to quote from it?

ROY K. WILSON  
NATIONAL EDUCATION ASSN.  
WASHINGTON, D. C.

Dear Sir:

Hurrah for BUSINESS WEEK. After the damaging distortions of Life's education series and the promotion of such extremists as Arthur Bestor by U. S. News & World Report it is comforting to find a nationally circulated magazine taking such a realistic and constructive approach to the problems of American education. As a member of the Board of Education of Wichita I would like to present reprints to the other members of the board and chief administrators. . . .

EDWANA DENNING COLLINS  
JOHN L. DENNING & CO., INC.  
WICHITA, KAN.

Dear Sir:

At a recent educational conference in Philadelphia, the articles in BUSINESS WEEK's April 19th and 26th issues were highly recommended, those on the subject of American Problems and Opportunities in Education. I am writing to ask that you place my name on the list for reprints. . . .

DRAYTON S. BRYANT  
THE PHILADELPHIA HOUSING  
AUTHORITY  
PHILADELPHIA, PA.

Dear Sir:

I have read with interest the article entitled The Real Trouble With U. S. Education. I compliment you on the article, and feel that business—and this, of course, includes the business press—must take a far greater interest in the problem than they have heretofore.

You might be interested in [our] plan . . . now in its fourth year, [which] has provided extra budgetal funds for teachers in the seven school districts concerned. It has always seemed extraordinary to me that the typical high school graduation ceremony will list literally

hundreds of scholarships for its graduates, but will have nothing comparable for those people who got these graduates into a gown and mortarboard. . . .

WILSON P. FOSS, III  
PRESIDENT, NEW YORK TRAP ROCK  
CORP.  
WEST NYACK, N. Y.

## Welcome to the Club

Dear Sir:

In the roster of your 1957 Billion Dollar Club [BW—Apr. 26 '58, p174] you made an omission which to us was significant, as well as a bit painful.

Last year our company, too, had sales of more than a billion—\$1,053,325,579, to be exact. As anyone in this competitive business will tell you, that figure represents a lot of cigarettes (Camel, Winston, Salem, Cavalier), pipe tobacco (Prince Albert, Carter Hall), and other tobacco products. . . .

BOWMAN GRAY  
PRESIDENT, R. J. REYNOLDS  
TOBACCO CO.  
WINSTON-SALEM, N. C.

## Crazy Suits

Dear Sir:

Re: Crazy Suits—On-the-Job Styles Take an Outlandish Turn [BW—Apr. 12 '58, p78]. . . I thought the article was quite factual, well organized, and should stimulate interest among your readers. . . .

SAMUEL B. RENTSCH, JR.  
LT (MC) USNR  
U. S. NAVAL SUBMARINE BASE  
NEW LONDON, CONN.

Dear Sir:

. . . In one place you state that the aluminized cloth developed and produced by Minnesota Mining & Manufacturing Co. is also made by Keasbey & Mattison Co.; in another you speak of "aluminum foil" material and quote Mine Safety Appliances Co.

Both inaccuracies apparently stem from an unawareness that two types of aluminized cloth exist: (1) material covered with an aluminum foil produced by Keasbey & Mattison; (2) the aluminum-coated material—some 50 times thinner than foil facings—developed and produced exclusively by 3M.

It is the 3M material, not "aluminum foil," which Mine Safety Appliances uses in its protective garments. . . .

C. T. VANGSNES  
MINNESOTA MINING &  
MANUFACTURING CO.  
ST. PAUL, MINN.

Another example of



CHEMICAL  
PROGRESS



# HOW CHEMISTRY TAMES ELECTRICITY

*... provides Class F insulation at Class B costs*

NEW VARNISH that tames both heat and electricity to provide more efficient insulation has been developed by G-E chemists. The new material, called G-E 9520 Alkanex® Varnish, greatly reduces insulation size and weight, permits higher operating temperatures — enables electrical equipment to deliver more power per pound.

Development of G-E Alkanex Varnish presented General Electric researchers with these problems: The new material had to be chemically compatible with standard wire enamels, yet resistant to oil, moisture, grease and acid. It could not cause excessive swelling of silicone rubber leads. Preferably it would cure in conventional baking ovens at normal times and temperatures.

Out of the G-E laboratories came a modified polyester resin with all these properties. Field tests confirmed the laboratories' findings: The new varnish offered Class F (155°C) insulation protection at a fraction of the cost of Class H varnishes previously used for this range. It can be used to increase the efficiency of dry type transformers, magnet coils, stators, armatures and other electrical components.

For data on G-E 9520 Alkanex Varnish, write Dept. IMS, CHEMICAL and METALLURGICAL DIVISION, General Electric Co., Schenectady, N.Y.

*Progress Is Our Most Important Product*

GENERAL  ELECTRIC

Silicone Fluids, Emulsions, Resins, Rubbers • Phenolic Molding Powders, Foundry Resins, Industrial Resins • Fused Magnesium Oxide • METHYLON® Coating Intermediates and Resins • LEXAN® Polycarbonate Resins • Mica Products, Varnished Cloths and Papers, Electrical Insulating Varnishes, Permalis, Wire Enamels, IRRATHENE® Insulation • Molded Plastics and Mycalex • TEXTOLITE® Decorative and Industrial Laminates • Man-Made Diamonds • Vacuum Melted Alloys • CARBOLOY® Cutting Tools • Permanent Magnets

# Greatest Truck Advance

*Now available in Ford, GMC, Chevrolet  
... Allison "Automatic Brain"*

**I**T's the greatest truck transmission advance in 30 years.

It's the Allison fully automatic transmission—now available in leading trucks, school buses and other commercial vehicles.

No longer must the flow of power be disconnected from the wheels every time the driver changes gears. No longer must the whole drive line take a costly jolt with every shift. With the Allison Automatic, engine power is delivered to the wheels *smoothly* and *continuously*. This saves fuel on every shift. And it eliminates engine lugging and overspeeding.

It's a whole new idea in transmissions. It's actually more than a transmission—it's an "Automatic Brain."

What can it do for your trucks? Take your cue from what it is doing today:

A Rocky Mountain trucker  
cuts engine maintenance 50%

•

A West Coast contractor hauls  
33 1/3% more payload per trip

•

A Utah ore hauler  
cuts brake maintenance 75%

•

A Michigan car-haul  
drives 100 extra miles per day

•

An Eastern sand hauler  
makes 3 trucks do the work of 4

*Allison*



# Transmission in 30 Years

*and Dodge*

*brings America A NEW KIND OF TRUCK*

It can do the same for you.

Your driver merely selects the range—then the Allison “Automatic Brain” takes over.

It multiplies engine torque 15 times. It delivers maximum power right from a dead stop. It cushions the engine and drive line against costly shock damage.

Shifting is automatic, so engines *can't* lug or race. Engine life is increased 35%. It shifts instantly, *even under full power.*

Its direct-drive lockup engages in *every* forward gear for maximum fuel economy.

Its built-in Hydraulic Retarder permits faster—yet safer—descents on even the steepest grades—saves you 50% or more on brake maintenance.

The Allison Automatic was developed from more than 10 years' service in the heaviest military and off-highway vehicles.

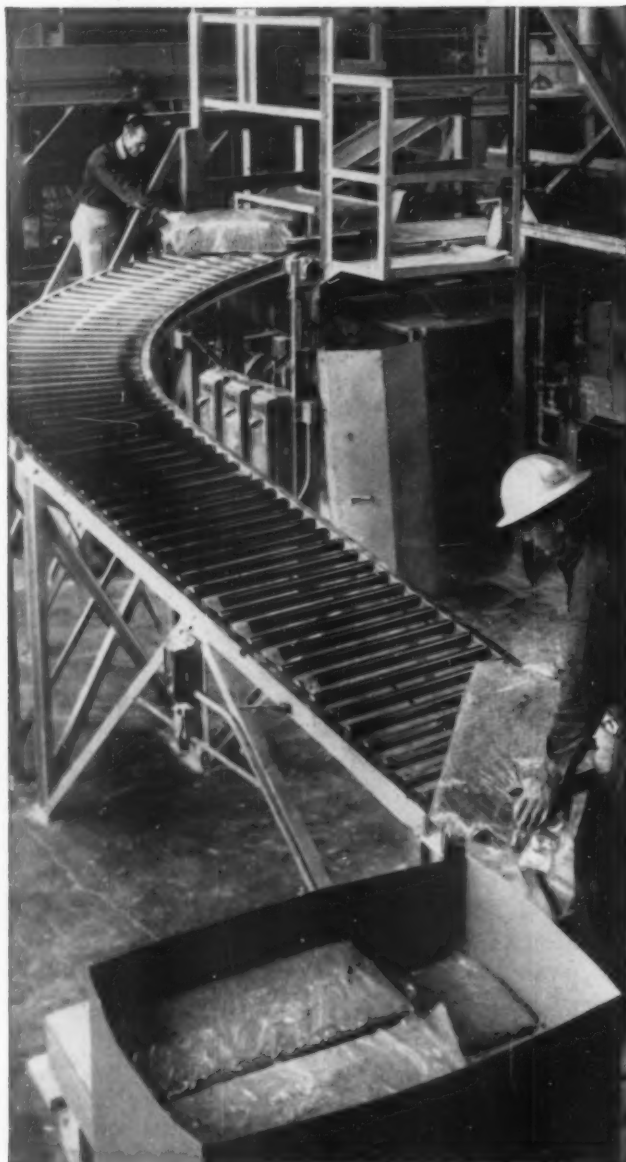
Four leading truck makes—Ford, GMC, Chevrolet and Dodge—have engineered the Allison Automatic into their newest medium and heavy-duty trucks, school buses and other commercial vehicles. It is also available as an integral engine-transmission power plant from Chrysler and Ford Industrial Engine Divisions.

Before you buy another truck, find out how an Allison Fully Automatic Truck Transmission can repay its modest cost many times over in *your* trucking operation. See your dealer in Ford, GMC, Chevrolet and Dodge. Or write:

ALLISON DIVISION OF GENERAL MOTORS, Indianapolis 6, Indiana

 **FULLY AUTOMATIC TRUCK** *Transmissions*

# Goodrich-Gulf Chemicals, Inc.



*After processing, Ameripol rubber is compressed in bales, dusted or wrapped for protection in plastic film. The dusted or film wrapped bale can be fed directly into Banbury in your plant.*

**Goodrich-Gulf Chemicals, Inc.**

3121 Euclid Avenue Cleveland 15, Ohio

all  
**Ameripol**

users  
get "Big-order"  
service

**A**LL users of Ameripol man-made rubber like the big-order service they're getting through our expanded production and warehousing service.

Your orders are filled from warehouses in Chicago, Akron, or Port Newark, N. J., or from our giant plants in Institute, W. Va., or Port Neches, Texas. Goodrich-Gulf is one of the largest producers of man-made rubber, and is geared to serve you promptly.

Ameripol is recognized as the preferred rubber for tires and floor tile, for a wide range of industrial products from conveyor belts to extruded gaskets. Call us for your requirements.



Cold Non-Oil  
Polymers  
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Polymers  
•  
Hot Non-Oil  
Polymers

THE NAME TO REMEMBER FOR QUALITY BACKED BY YEARS OF RESEARCH AND EXPERIENCE



A flip of the switch...a press of the button...

# LOOK, NO HANDS



## Auto-typist eliminates routine typing and dictation...by automation

Auto-typist brings you office automation! It's the fastest, most accurate way to handle all repetitive correspondence... and it's true that well over half of general office correspondence is routine, or follows a standard form. Sales letters, order acknowledgments, answers to inquiries, collection letters, just to name a few, can be handled efficiently and *economically* by Auto-typist. Any one of your girls can turn out 125 letters a day with an Auto-typist—3 to 4 times normal manual typing output. Any standard office typewriter can be converted into an automatic typing machine—and one

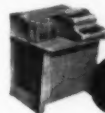
average typist can operate as many as four Auto-typists.

How Auto-typist works... Carefully prepared letters or paragraphs are perforated on a paper roll which operates the typewriter keys... similar to a player-piano roll. Twenty or thirty complete letters can be included, or a series of paragraphs which can be combined to make up many letters.

Salutations are manually typed, then, by merely pushing the numbered button or buttons that correspond to the letter or paragraphs desired, Auto-typist automatically picks out the letter, or assembles the

paragraphs in proper order, and types it *perfectly*! Manual insertions can also be made at any point desired.

The Auto-typist method... the perfect push-button method of typing automatically... offers definite savings to every cost-conscious organization. Write for free booklet.



### Auto-typist

American Automatic Typewriter Co.  
2323 N. Pulaski Road, Chicago 39, Illinois

95-B

Gentlemen:

Please send me a copy of "Quality with Quantity through Auto-typist Personalized Letters."

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Company & Title

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AMERICAN AUTOMATIC TYPEWRITER COMPANY • 2323 NORTH PULASKI ROAD • CHICAGO 39, ILLINOIS  
MANUFACTURERS OF AUTO-TYPIST, COPY-TYPIST AND CABLE-TYPIST

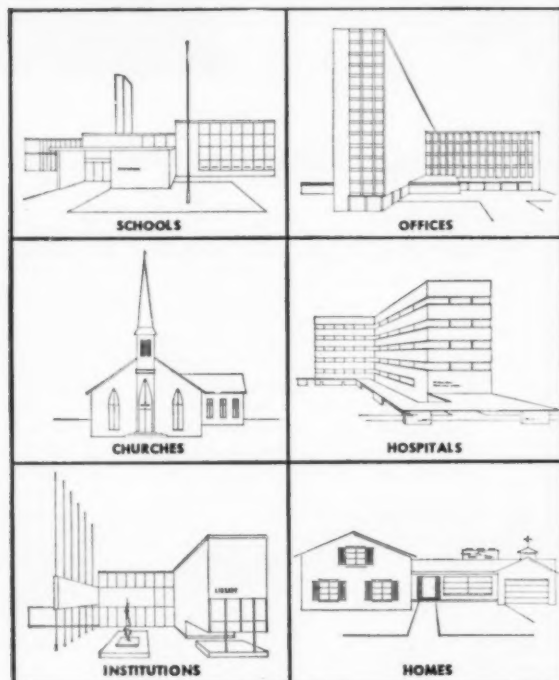


*In just ten years, Styrofoam has set new high insulating standards in the cold storage rooms of leading U.S. companies . . .*

## **No wonder Styrofoam®**

Ten years ago, a newcomer in the field . . . today, the most copied insulation on the market. That's the performance record established by Styrofoam® in the low-temperature rooms of leading companies throughout the United States and Canada. And now . . . architects and builders are taking advantage of Styrofoam in "comfort" applications, too.

A close look at its unmatched combination of properties tells you why Styrofoam is a lastingly efficient, maintenance-free insulation. It has a permanent low "K" factor that stays low because Styrofoam is waterproof. It has thousands of noninterconnecting air cells that water can't penetrate. It doesn't rot, mold or deteriorate . . .

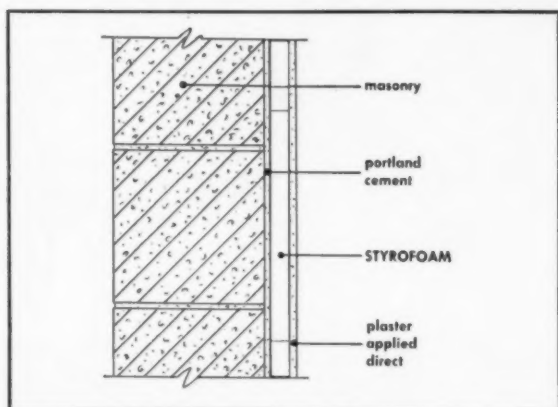


**Styrofoam holds the right temperature in freezer room or front office**



## is proving superior as "comfort" insulation!

doesn't attract insects, vermin and rodents. In addition, Styrofoam is lightweight, clean and easy to handle. This remarkable combination of properties makes Styrofoam a superior insulation for churches, schools, offices and homes as well as for cold storage rooms.



**New construction method** substantially cuts costs in masonry construction by eliminating furring and lathing—assures a warm, dry interior. Styrofoam is adhered to brick or concrete block wall with Portland cement mortar. Plaster keys directly to Styrofoam. For more information, write to THE DOW CHEMICAL COMPANY, Midland, Michigan, Plastic Sales Department 1919H.

\*Styrofoam is a registered trademark of The Dow Chemical Company

YOU CAN DEPEND ON



because it has lifetime insulating efficiency, unyielding resistance to moisture



# Guide to more effective **Air**

No.1 in a series of Worthington reports on modern plant



**Production**—Nation-wide surveys show air conditioning increases productivity between 7% and 50%.

**The Importance of Air Conditioning**—Enlightened members of the business community do not regard air conditioning as a mere cooling device. They look on it, rather, as an essential production tool deserving of their most careful and earnest consideration. Management has learned that air conditioning has a tremendous effect on people. It reduces turnover and absenteeism, and makes recruiting easier. It protects capital investment, too. Air conditioning helps eliminate rusting through humidity control, and halts damage to walls caused by seasonal expansion and contraction. In new building construction, it does away with the need for many expensive windows, reduces maintenance costs and increases the amount of usable floor space.

Many manufacturers have discovered, too, that air conditioning can make an enormous contribution to their product quality.

Not only is efficiency continued through the entire year, but air conditioning also filters out dust and other airborne particles harmful to many processes.

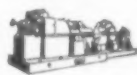
**The Kinds of Air Conditioning**—Selection of equipment depends primarily on your physical plant. There are two basic categories of air conditioning equipment—package and central. Packaged units are normally (though not exclusively) used in existing plants. They are self-contained units having a built-in compressor, chiller, air handling equipment and electric motor. Package units are usually spotted in strategic locations throughout the plant. Central air conditioning systems are built from individual components selected to best satisfy the job requirements. A single equipment group air conditions the entire plant.



AIR CONDITIONING



REFRIGERATION



TURBINES



COMPRESSORS



PUMPS



CONSTRUCTION EQUIPMENT



POSITIONING EQUIPMENT

# power planning: conditioning

requirements



**Quality**—Air conditioning is a significant factor in maintaining the high quality of your product. It helps keep efficiency at maximum levels all year 'round.



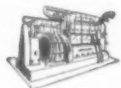
**Employees**—Improved morale and sharply reduced absenteeism are immediate benefits. Air conditioning also betters your position in the local labor market.



**Equipment**—Humidity control in air conditioning reduces rusting, while steady temperatures prevent harmful expansion and contraction of walls.

**Selection and Service**—Choice of air conditioning equipment is critical. It is wise to select from a complete line. Worthington, for example, manufactures a full range of air conditioning equipment. This permits a completely unbiased recommendation. You get precisely the equipment that suits your plant. Service facilities are also extremely vital. It is advisable to select equipment by a manufacturer who maintains regional and distributor depots. The Worthington service system is available for on-the-spot supervision of installation, and initial start-up, and periodic inspections. Instruction of your personnel in maintenance and operating procedures is also available. Lastly, the Worthington system provides immediate spare parts delivery and trouble shooting help by service experts located in five strategic Regional Engineering & Service centers.

**FREE—Power Planning Guide.** New Worthington brochure describes nine helpful ways for putting power to work in your plant. Includes additional facts and figures on the subject of this advertisement. Write: Worthington Corporation, Section 109-1, Harrison, N. J.



ENGINES



POWER TRANSMISSION EQUIPMENT



STEAM POWER

## WORTHINGTON



# Only **underwood** brings 10-key

1. POSTING AND BALANCING  
CUSTOMERS' ACCOUNTS

5. CALCULATING

4. PORTABLE ADDING  
AND SUBTRACTING

*Simple 10-Key underwood Master-Touch... Fast, Easy, Accurate*

*Fast because just 10 keys handle all figuring!*

*Easy because there's no need to watch the keys!*

*Accurate because you can enter figures as you read them!*

# underwood

**MASTERS YOUR  
PAPERWORK\***



# simplicity to every figuring job!

underwood 10-key  
*Master-Touch*\*



2. ADDING AND  
SUBTRACTING



3. GENERAL ACCOUNTING

"like wearing magic gloves!"



1. Low priced POST-MASTER\* saves *all the time* you spend footing and balancing customers' accounts, locating and correcting trial balance errors, putting the detail on and balancing statements. It posts, balances and proves ledger and statements in a single line entry. Fast and error-free. *Easy terms available.*
2. Famous UNDERWOOD SUNDSTRAND 10-Key Adding-Subtracting Machine. Complete figuring unit — adds, subtracts, multiplies. *All models handle forms as well as tape* for simultaneous figuring and record-keeping.
3. Multi-total GENERAL ACCOUNTING MACHINE for any job requiring multiple totals and balances. Can be

programmed for payrolls, accounts receivable, accounts payable, statistical records and reports, budgetary records, etc. *Offers many automatic features.*

4. Just 7½ lbs., the new ADD-MATE\* is the *only phone-size, all-electric adding-subtracting machine*. Ideal for store, home or office — adds, subtracts, multiplies, totals, sub-totals. Big-machine results for only \$168.50 plus tax. *Carrying case optional.*
5. New PRINTING CALCULATOR combines the 10-key simplicity of Underwood Sundstrand adding-subtracting with *touch multiplication, automatic division and constant feature* for easy handling of all business figures.

\* An Underwood trade-mark

# HOW **HERCULES** HELPS...

**REVOLUTIONIZE HOSPITAL WARE**—Zylon Products Company's new plastic hospital utensils molded with Pro-fax\*, Hercules polypropylene, cost much less than existing equipment, provide added comfort and convenience for patients and staff. Colorful, lightweight, and easy to handle, they can be steam-sterilized, will resist stains, chemicals and saline solutions.

\*Hercules Trademark



**REVOLUTIONIZE RESTAURANT MENUS**—Meat processors can now offer succulent steaks at budget prices. Portion steaks cut from utility or commercial beef are easily tenderized with Age-It®, Hercules' "dip, drain, and freeze" liquid tenderizer. Hercules also produces MSG, monosodium glutamate, and HVP, hydrolyzed vegetable protein.



**REVOLUTIONIZE TRAILERS**—Mid-States Corporation's two-tone Mobile Homes are not only gay, but they are weather-defying, too, because they are finished with Parlon®-fortified enamels supplied by Capitol Chemical Company, Chicago. Parlon adds both durability and drying speed. Mid-States gains fast taping, 45-minute recoating, and dust-free surfaces for outside storage within three-quarters of an hour.



**HERCULES POWDER COMPANY**

INCORPORATED  
900 Market Street, Wilmington 99, Delaware

CHEMICAL MATERIALS FOR INDUSTRY

**HERCULES**

# BUSINESS OUTLOOK

BUSINESS WEEK  
MAY 17, 1958



Key indicators, more and more, point to some leveling out in the business curve (BW—May3'58,p25). And if so, it's high time

For, measured by almost any yardstick you choose, **this already is the postwar's most serious slump.** Some quick examples:

- **Industrial production** has dropped 14%, as against 10% in 1953-54.
- **Gross national product** is down 4% this time vs. 2½% in 1953-54.
- **Factory employment's** drop is about 1% deeper than in 1953-54.
- **Unemployment** has risen substantially more this time (though differences in the methods of counting obscure the precise variations).

Fortunately, **spring has brought an air of hopefulness.** You detect it, in rising chorus, in day-to-day reports of businessmen themselves.

Moreover, some of the basic figures give body to these hopes.

**Personal income** has firmed up ever so slightly since February, and this may be credited with stabilizing **retail sales.** For the future, there is the much-cited rise in **government spending** plus growing indications of greater activity in **construction**, including **housing.**

—•—

**Personal income**, after falling more than \$5-billion at an annual rate between August and February, **seems to have recovered a bit.**

The annual rate of \$342.8-billion estimated by the Dept. of Commerce for April would be about \$1-billion above February's low. Moreover, it is about \$1½-billion above a year ago (though the year-to-year showing is bound to worsen this summer as we compare with 1957 peaks).

There is room to wish, of course, that the **composition** of personal income were a little healthier. **Too much of it now is coming from government** and too little from industry.

But, in a measure, this is due to the "automatic stabilizers" we have talked about for so long. They're supposed to make up part of the income lost when recession sets in, and they're coming through.

**Wage-and-salary payments to individuals** have fallen more than \$8-billion from their 1957 top (at seasonally adjusted annual rates). Such payments continued to decline in March and April.

But **unemployment compensation payments** also rose, of course. Meanwhile, **social security benefits** were going up pretty rapidly.

Then, in recent weeks, there has been an **increase in payments to veterans**, principally due to larger rebates on life insurance.

Here you have Uncle Sam contributing almost \$2-billion additional (at an annual rate) to personal income in March and April alone. This, with the farm income gain, accounts for the fact that the total turned up in those months even though industry's payrolls still were sagging.

Washington's outlays, incidentally, are up nearly \$5-billion in the last year for unemployment benefits, social security, and veterans.

**And, regardless of source, these dollars support consumer spending.**

# BUSINESS OUTLOOK (Continued)

BUSINESS WEEK

MAY 17, 1958

Credit personal income's small upturn or what you will, **retail sales in April improved** on the disappointing February-March figures.

Dollar volume of all types of retail establishments pulled about 2% ahead of March after allowance for the number of trading days and seasonal factors. Moreover, **it got back very close to year-ago levels.**

Statistics on retail sales, like most others these days, are subject to various interpretations. You can quite reasonably say, for example, that **food stores' fine gains are robbing other retailers.**

You can also complain that **food stores' gains are mostly price.**

Dollar volume of all retailers so far this year comes to \$60.8-billion. That's a scant \$230-million behind the same 1957 period.

But we are that close to a year ago only because food stores in the first four months rang up a gain of \$1¼-billion. (Automotive establishments fell more than \$1½-billion behind last year while changes for other types of stores were relatively small and about canceled out.)

This gain in food sales means little in terms of diet. Nearly two-thirds represents higher prices, most of the rest more mouths to feed.

Off the figures, auto dealers may feel that the high cost of feeding the family has **left people with too little to buy cars.**

Yet it's hardly as simple as that, and nobody will ever be able to prove it anyway. There is also the factor that unemployment, smaller weekly pay envelopes, and insecurity work against car buying—especially mortgaging future income on installments.

Moreover, **the high cost of new cars may have encouraged most heads of households to make the old one do** while spending on other things.

—•—

**Homebuilding helped spark recovery** from both the 1949 and 1954 recessions—and now hopes are rising that it will repeat as **government steps to aid housing begin taking hold** (page 46).

Already there's an omen: **New homes started in April** jumped to about a 950,000 annual rate, up from under 900,000 in February and March.

Moreover, it's doubtful that April had yet felt the stimulus of Washington's efforts to any extent. Rather, last month's upturn probably was mainly a recovery from the weather-imposed rates of earlier months.

**One word of caution is needed in connection with the sharp upsurge in applications for FHA and VA mortgage guarantees:**

A lot of the rush comes from applicants who hadn't a chance under the mortgage terms and tight money conditions of the last 18 months. This is particularly true where existing houses are involved, though it applies to some extent to new ones as well.

—•—

**Straws in the wind:** If you're looking for signs that basic production may be turning the corner, you may be getting the signal from **steel and electric power.** Steel this week is scheduled to push above 50% once again, and power output has gone ahead of a year ago.



## ENJAY BUTYL fabulous new rubber

*Best travel companion for tires...new Butyl tubes*



Summer driving ahead! It can be carefree and safe with new inner tubes made of Enjay Butyl rubber. Put one in every new or recapped tube-type tire you buy—or in a tubeless tire that may resist repair. Proven superior for over ten years because they hold air better and last longer, 98% of all inner tubes are now made of Butyl. Your tire dealer can show you how a new Butyl tube adds to your driving pleasure and safety.



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PLEXIGLAS makes possible signs that stand out in today's competition for customers. It enables sign designers to use large areas of color and light to command attention to the country's best known names, products and services. Don't be behind the times in signs. Base *your* company sign program—whether it involves a single unit or thousands, of any size—on PLEXIGLAS.

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**OLD WAY:** anonymous, costly



**NEW WAY:** distinctive, economical

## Hose sales climb... package cost drops 58% ...with switch to colorful CORRUGATED boxes

Old-fashioned reels may have been good enough a few years ago, but today the smart distributor of automotive heater hose wants it packaged in color-printed corrugated drums.

He talks with his checkbook too, as this Denver manufacturer found out. Hose had been traditionally shipped on reels—cost \$1.55 each. Then a sudden metal shortage made reels hard to get. Corrugated drums were tried—cost 65c. Distributors loved them. Easier to handle. Disposable. Better looking. Lighter in weight (reduced shipping charges 10 to 15%).

And look... color on an industrial

container. For only pennies extra, this otherwise drab box gets an exciting look. No heater hose ever had more powerful brand identification. At the point of sale, anonymous reels just don't have a chance. This happy manufacturer attributes a considerable amount of a big sales gain to the colorful corrugated package.

In countless packaging applications today, corrugated is boosting sales,

reducing costs, improving dealer and customer acceptance.

Do these goals appeal to you? Talk with your nearby boxmaker. He's listed in your classified telephone directory under "Boxes—Corrugated."

Langston doesn't sell corrugated, only the machines that make it. Since 1902, these machines have led the field in efficiency and dependability. Samuel M. Langston Co., Camden 4, N.J.

THINK FIRST OF CORRUGATED



**LANGSTON**

Corrugated Container Machinery



## THE PRICE PICTURE—I

# What's Wrong, What To Do

Now, in the midst of recession, just about every U.S. citizen above the age of irresponsibility is concerned about prices—why they've stayed up while production and employment have dropped, what's to be done about the twin worries of high prices and low output.

- For businessmen (page 36), this is becoming a critical problem, with sharp conflicts developing between manufacturers and suppliers and the retailers who have to face highly price-resistant customers.

- For legislators and government policymakers (page 34), the paradox of so-called "inflationary recession" is being intensively analyzed by some of the nation's leading economists, preliminary to Congressional action on taxes, spending, or new ways to promote stable economic growth.

- **Maladjustment**—There is growing agreement among economists that the U.S. price system—which, according to tradition, is supposed to allocate labor and resources to their most efficient use, to produce economic balance at high levels of employment, and to stimulate growth—has been functioning badly.

For the system to do these jobs well, most economists have long maintained, prices should be free to move up or down in response to consumer demand, to the changing costs and earnings of various industries, to desires of business and consumers to save and invest.

Many economists, though by no means all, have concluded that big business, big labor, and big government (which now accounts for more than 20% of all spending on goods and services and which supports the prices of many agricultural and mineral products) have greatly reduced the flexibility of key prices in the U.S. They have created a price system that stays rigid or even rises when business drops (BW—Jun. 15 '57, p188).

- **Basic Faults**—Basic flaws in this price system that sometimes make conventional fiscal and monetary policies backfire. Policies that are aimed at curbing price rises may only reduce demand and output without putting a real dent in the price structure (BW—May 10 '58, p36).

The problem facing Congress and the Administration, therefore, is not only how to cure the recession but also the longer-range problem of how to draw up policies that won't require government or the banking authorities to choke off economic growth in order to keep prices stable.

- **Differing Views**—Though economists generally agree on the importance of trying to achieve high employment, economic growth, and relative price stability (in roughly that order of priority), there are sharp disagreements about how to attain these goals. These are already being argued out as the Joint Economic Committee hearings wear on. Should government take a bigger role in controlling or directing the price system? Or should the system be remade more closely in the image of the flexible arrangement that allegedly once existed. You can already see the formation of the main blocs of therapists:

- The **"It's Not Perfect But Let It Alone"** school, represented, for instance, by Milton Friedman of the University of Chicago: "The goal of an extremely high degree of economic stability is certainly a splendid one. Our ability to attain it, however, is limited. . . . The attempt to do more than we can will itself be a disturbance that may increase rather than reduce instability."

- The **"Make the System Freer and Use Existing Controls Better"** school, represented by Neil H. Jacoby of the University of California at Los Angeles, a former member of Eisenhower's Council of Economic Advisers. Jacoby would sharpen monetary and fiscal controls to make them broader and more equitable. He would increase competition not only by enforcing the antitrust laws but also by extending them to cover labor unions, cooperatives, and other exempt activities. He would also have government gradually withdraw from price-fixing and price-supporting and reduce tariffs, import quotas, and other restrictions on international trade.

- The closely related but somewhat more pessimistic monetary-fiscal policy school represented by Arthur Smithies of Harvard: "There is . . . the possibility that money and fiscal measures

will not be sufficient. The issue will then have to be faced whether a socially disturbing rate of price increase should be tolerated, or whether direct measures are to be taken that will increase competition in the labor and product markets with the object of modifying wage demands and stiffening employer resistance to them."

- The **"We Need New Control Instruments"** school, which ranges from proponents of moderate reforms in monetary policy to those who want far more government planning and regulation of prices and wages.

Among the moderates are Otto Eckstein of Harvard, who calls for policies to cope with bottlenecks such as controls on consumer credit, and wants better means of influencing the level of investment, such as variable depreciation allowances. Others call for better coordination of over-all government economic policy, expert bodies to make recommendations to guide wage and price decisions by unions or corporations, and measures to make taxes and contributions to social security more readily variable by the government.

- **From the Top Down**—Some direct interventionists, such as Abba P. Lerner of Johns Hopkins University, insist that "just as public utility prices can be and are being regulated so as to prevent monopolistic exploitation, so administered prices and wages can and should be regulated so as to prevent sellers' inflation and the depression it may bring with it."

Allan Gruchy of the University of Maryland would have the U.S. follow the example of Sweden and Norway and rely more heavily on national economic planning, more negotiation and consultation between government and major economic groups, and less on "manipulation of the economy by the Treasury and the Federal Reserve System."

The economists aren't really so far apart on what's wrong with the U.S. price system. But how to treat it obviously will have to be hammered out not primarily by economists but by the politicians, the voters, and the lobbies—in this session and, doubtless, for many sessions to come.

# Congress Quizzes the Economists



THESE ECONOMISTS (facing camera) are among 46 who will give the Joint Economic Committee views on prices—and what they have to do with economic growth and slump.



QUIZZER Henry S. Reuss, a Democratic congressman from Wisconsin, tangled with economist on issue of prices in recession.

CHAIRMAN of the Joint Committee is Rep. Wright Patman. His group was often in conflict with opinions of witnesses.

Members of Congress this week got a fresh look at their favorite villain of the recession—sticky prices.

Testimony from the first group of the professional economists Congress plans to hear didn't fit the ideas of most lawmakers, or, indeed, of many businessmen and many of the economists who will be testifying later. The witnesses are appearing before the Joint Economic Committee in a series of panels. Altogether, 46 experts are scheduled to testify in hearings extending through May 22.

Actually, the committee is not primarily examining the role of prices in the recession. Its target is broader (page 33): the role of prices in the whole concept of economic growth and stability. But in the opening days of the hearings, the recession kept bobbing up in practically every exchange.

- **Controversial Concepts**—So by mid-week, lawmakers had been presented ideas like these—ideas many of which will be vigorously disputed by the economists they hear from later.

- Prices are not nearly so sticky as the official indexes make them out.

- There's hot price competition right now even in such industries as steel and autos, which are usually classified with the "administered price" industries.

- The price measurements followed most closely by lawmakers and businessmen—the Bureau of Labor Statistics wholesale and consumer price indexes—are only rough approximations of price movements and may even be misrepresenting basic trends.

- Even the interpretation commonly being given these indexes was challenged. Several economists—joined by the man in charge of gathering the FLS indexes—agreed that prices in this recession are not showing unusual stickiness. On the contrary, they see the indexes performing just about as they have in previous downturns.

## I. Is Inflation Necessary?

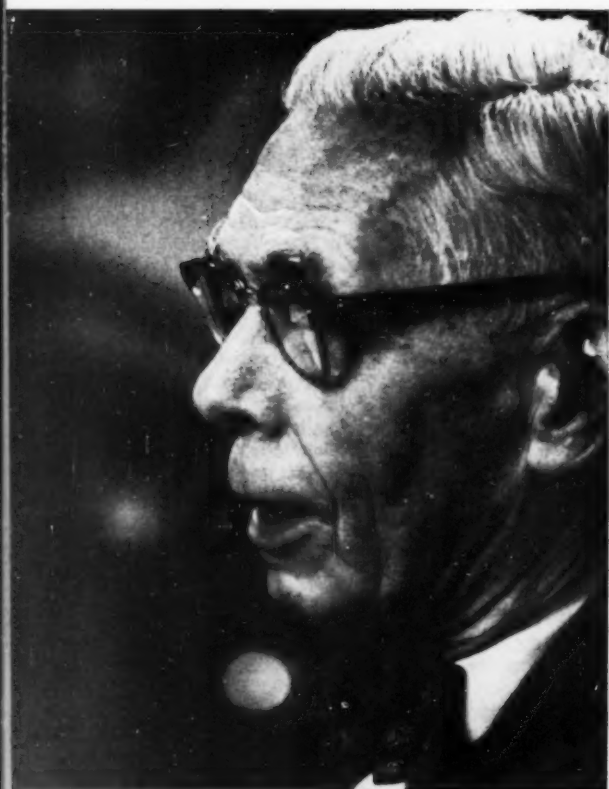
The hearings opened this week with a session supposed to be devoted to the relationship of prices to economic growth and full employment. What the committee wanted to know was whether it's possible to have both stable prices and full employment, or whether we will have to pay for full employment with an ever-rising general price level—that is, creeping inflation.

Most of the first panelists see nothing basically inconsistent in the two goals. But all of them warned that



BETTY FISHMAN of West Virginia University joined husband Leo in favor of retaining Employment Act wording as is.

G. L. BACH of Carnegie Tech backed change in Employment Act to make stable prices a U. S. goal.



EDWIN NOURSE, first chairman of Council of Economic Advisers, argued stable prices are already a goal by implication.



JOSEPH ASCHHEIM of Johns Hopkins said prices have usually fallen in the past when unemployment reached about 5%.



something more by way of public policy would be needed.

• **New Goal**—Most but not all of the first panelists recommended—as a first step—that the wording of the Employment Act be changed to make stable prices an explicit goal of national policy. The act now mentions “maximum purchasing power” among its goals, and veteran economist Edwin G. Nourse argued that this implies a stable price level. But Nourse—first chairman of the President’s Council of Economic Advisers, which the act created—was opposed by G. L. Bach, dean of the Graduate School of Industrial Administration at Carnegie Tech, and by Joseph Aschheim of Johns Hopkins University. Both stressed the importance of writing price language into the law.

A husband and wife team of economists—Leo and Betty Fishman of West Virginia University—were dissenters. They believe the wording of the present law is good enough.

• **Opposing Stands**—In a statement, Fishman argued that economic expansion occurs when aggregate demand is strong in relation to output—the same conditions that give rise to rising prices.

Aschheim challenged Fishman’s view that growth and price increases go together, citing a paper prepared for the committee by Otto Eckstein of Harvard. Eckstein says that “periods of rapid growth occurred with and without inflation,” not only in this country but in many other countries as well. This is a clash of views the committee will hear more about during the hearings.

• **How Many Jobless?**—Aschheim went to the heart of the policy question that worries politicians: How much unemployment is necessary before the upward pressure on prices relaxes?

First, Aschheim granted that if full employment is defined as a permanent excess of demand for labor, then prices will rise. But if full employment is defined as the maximum level consistent with price stability—as he thinks it should be—then the task of the policymakers will be lightened. Moreover, he added, prices fell in 1949 when unemployment averaged only 5.5% of the labor force, and again in 1954 when unemployment was at 5%—levels of unemployment with which he feels it’s possible for policymakers to live. (On a seasonally adjusted basis, unemployment is now at 7%.)

## II. Are Indexes Wrong?

Aschheim introduced an idea that will crop up often: that the BLS indexes don’t tell the whole story about price declines in the current recession.

Tuesday’s hearings resulted in a broad criticism of the price indexes from Kenneth J. Arrow, professor of

economics and statistics at Stanford University, and from Martin Bailey of the University of Chicago.

• **Crossfire**—Bailey found himself at odds with two of the toughest debaters in Congress when he argued that prices are not nearly so rigid as the official indexes indicate. First he ran into a barrage of questions from Rep. Henry S. Reuss (D-Wis.); later, when Sen. Joseph C. O’Mahoney (D-Wyo.) came into the room, he had to defend himself afresh. Both Reuss and O’Mahoney have often criticized industry for failure to adjust prices downward.

In a brief opening statement, Bailey tartly told the committee that Congressional interest in so-called administered prices was largely a waste of time. He believes that there is much less price rigidity than industries themselves claim there is, particularly in times of recession. In steel and the petroleum industries, he said, “the evidence is conclusive that actual prices are sensitive to month-to-month changes in market conditions.” Yet these are often cited as examples of industries in which relatively few big companies control prices.

• **GM Cited**—O’Mahoney reminded Bailey that Harlow Curtice, president of General Motors, had recently testified before a Congressional committee that the company set its prices with the idea of netting a return of 15% on net value. This, O’Mahoney implied, was a clear case of administered pricing.

“But when the chips are down, they’ll have to meet the market or go broke,” Bailey said.

O’Mahoney then added that George Humphrey, former Secretary of the Treasury, now head of National Steel Corp., recently testified that steel prices were not going to be reduced even though capacity was then around 48%.

Steel executives are never eager to admit price cutting occurs, Bailey told the committee. In the industry it’s considered “not a nice thing to do.” But in practice, he said, salesmen do cut prices—sometimes in dollars, sometimes by increasing services—and he is convinced such cuts are common in the present market.

• **Money Might Help**—H. E. Riley, chief of the BLS division of prices and cost of living, and O. V. Wells, who supervises price studies for the Dept. of Agriculture, agreed that their indexes could be improved if more funds were available.

Riley, in response to questions, said the BLS indexes are performing just about as they have in previous recessions. He cited a study comparing recorded price changes with the Federal Reserve Board’s index of industrial production in the six downturns preceding the present one.

“In each instance, consumer prices have been sticky,” he summed up.

## THE PRICE PICTURE—III

# Retailers

Prices of goods—from pipe fittings to mattresses—are caught in the middle of a tug-of-war. Consumers and retailers are on one end of the rope, and manufacturers and distributors are on the other.

That’s pretty much the picture as BUSINESS WEEK reporters found it this week talking to businessmen around the country. At every level—manufacturer, wholesaler, retailer—most businessmen adamantly insist that general price reductions are out of the question. But these same businessmen admit that:

- Price has become an increasingly important factor in moving goods.

- Special one-shot price deals are available, though you still have to dig hard to find them.

- There is a softness in the marketplace that might result in open price adjustments this fall if the economy doesn’t turn upward soon.

- **Firmer Than Most**—Still, most agree prices are stickier than you might expect in a recession that already has progressed further than any since the end of World War II. As the Monthly Review of the Federal Reserve Bank of New York points out: “Despite the more rapid contraction in the current recession, neither wholesale nor retail prices have responded to nearly the same extent as in the previous postwar contractions.”

## I. At Retailers’ Expense

It’s the merchants—the businessmen who are closest to the wary consumer—who have been feeling the greatest pressure. BUSINESS WEEK reporters in city after city found them agreeing that the consumer is highly price-conscious. Price promotions are far more important in their merchandising plans this year.

In St. Louis, for example, the division manager of a big chain says: “We have been slashing prices and won’t advertise an item unless it has been cut 25%. The results have been good.”

- **Squeezing Last Drop**—In many cases, though, merchants frankly admit that the price promotions are not the result of actual reductions but are either (1) clean-out sales of merchandise they can’t move any other way or (2) advertising campaigns that stress prices that have been available all along.

In fact, a preponderance of retail opinion adds up to the fact that merchants have just about squeezed out the last drop of water in their own price structures. They say it’s up to the distributors and manufacturers now to



# Say, "It's the Manufacturers' Turn"

take a bigger share of the price-cut medicine.

• **The Burden**—A Portland (Ore.) merchant admits there has been some shading of prices by manufacturers, but he adds: "As far as I can determine, retail is still bearing 65% to 70% of all price-cutting today."

From all parts of the country, disgruntled retailers reported the same tight squeeze—a price-conscious consumer whom they are attempting to satisfy and a reluctant batch of suppliers who give price concessions only under the greatest pressure.

According to a big Milwaukee store: "Unless there is a cut on the wholesale level, we can't afford to cut on the retail level, because of our fixed costs." Another agreed: "We're pushing price on the basis of 'a good value for your money.' But the prices are the same as we've had. We can't get cuts on the manufacturing level, and we can't lower our own prices unless we do—we've squeezed as tight as we can."

A San Francisco hardware dealer says his suppliers "aren't interested in making a deal and, unless we get concessions—and we are trying hard—we can't reduce prices on the markup we work on."

• **Appliances**—The most bitter complaints are directed at appliance manufacturers, a part of the economy particularly hard hit by the recession.

Almost with one voice, merchants moan that they have been unable to crack a solid price front among appliance makers. Even the end of fair trade on small appliances did nothing more than take a big hunk out of the retailers' margins.

A St. Louis furniture store sales manager acidly commented: "Appliance manufacturers, for some reason, seem to be happy not to be doing any business. Cut-throat competition precludes any further reductions from retailers. A break must come from the producers, but I haven't seen anything worthwhile yet. I don't think the appliance people are hungry enough yet."

• **Selling for Exercise**—A Los Angeles merchant echoed this feeling: "Sure, we are selling appliances, but it's just exercise as far as we are concerned. The manufacturers apparently think they can get along without the retailers. One of these days they are going to have to do something about their prices."

In Milwaukee, a merchandiser who has been able to wring some concessions from softgoods producers added his bit: "We think we could move appliances if the manufacturers would

come down in price, but they say they can't do it—and we certainly can't unless they do."

Even massive buying power doesn't always help. The head of an important Atlanta store with direct lines into New York says a few makers have made slight concessions, but the over-all feeling among manufacturers seems to be that there is no need to slash prices yet.

## II. Pressure Mounts

Despite the apparent rigidity in the price structure, pressure to cut prices obviously is mounting—and there are signs it already is having some effect.

The same merchants who say it is hard to find good buys admit they are able to make special deals with manufacturers. In many cases, however, this is on obsolete merchandise. Few report that new, regular lines of products are being offered at any substantial discounts.

But this may be changing. An Omaha low-cost volume homebuilder says the recession has been the best thing for him in years. Easier credit has tripled his building plans for \$11,900 to \$14,000 homes. He says he is able to hold that price because "suppliers of built-in stoves, sinks, and other equipment for the first time are willing to dicker on price discounts for volume purchases."

• **Hidden Cuts**—Right now, manufacturers seem to be doggedly trying to hold their list price structure. But, when it comes to hard bargaining for volume, they will often make a deal, as long as they don't have to announce it openly.

Then, too, there is evidence that, rather than cut prices on regular merchandise, manufacturers are adding features to give better value to new lines at the old prices.

Other manufacturers are finding it necessary to meet demand for lower prices by bringing out new lower-priced lines. This is true of Westinghouse Electric Corp. on appliances. And in San Francisco, a luggage maker found it had to go into a cheaper line for the first time because of "the reluctance of dealers to maintain a basic stock of higher-priced items—they only want promotion goods."

• **Concessions**—Even in appliances, a leading maker admits that "big promotional sales, plus price allowances for advertising, have been made from time to time to move goods." That lets retailers shave \$30 off list, the company says. A spokesman figures this will prob-

ably be repeated this spring—though no blanket price cuts are possible.

The difficulty of getting concessions is summed up by a Milwaukee merchant who got across-the-board price cuts—except on appliances—for a 30-day store-wide sale: "If you push real hard, you can get them to yield on a one-shot deal, particularly if you hit them on their off season." A low-to-middle-price Houston store agrees: "We get price concessions from different brand-name suppliers, but we hit only one of them at a time."

• **More General Cuts**—At the same time, there are a few industries where hard price cuts are turning up. In textiles, for example, a shirt manufacturer reports cutting prices about 3%, and a Milwaukee store was able to get a 50% write-down on \$3.98 shirts, which it sells for \$2.98.

Sports equipment—fishing tackle, golf clubs—also is reported available at price concessions from makers. A sports equipment supply house in Phoenix says that if retailers "will promote uncatalogued items, buy in bigger lots (200 units instead of 60), the manufacturer will make a substantial price concession which we pass along to the customer."

Furniture and housewares are under strong price pressure, too. Some reductions on plastic dinnerware, for example, run as high as 30%. In furniture, what the trade calls "opportunity" buys are pretty common. Pittsburgh retailers report price cuts initiated by manufacturers in cheaper furniture lines. And a St. Louis buyer says he thinks that some of the makers are "becoming frightened."

You get some idea of the solid pressure on prices from Sears, Roebuck & Co. Presumably it gets better quotations from manufacturers all along the line by placing orders earlier and in to reduce prices came from the manufacturing costs. By summer, retail price cuts probably will be made from the manufacturer's level on down. So Sears' cuts may show up by fall.

Both Eastman and Bell & Howell have reduced some camera prices. In the case of Bell & Howell, the decision to reduce prices came from the manufacturing end based in part on hopes of reducing factory unit costs. With a new line scheduled, the company went to suppliers, told them of the planned price cuts (which B.&H. figures at 33½%) and asked them to refigure their prices on the basis of the additional volume that B.&H. would agree to buy.



IN LATIN AMERICA, jeering mobs in Caracas, Venezuela, stone and throw rotten eggs at Vice-Pres. Nixon—as they did earlier during his 18-day goodwill tour.



IN NORTH AFRICA, flag-carrying youths want France to hold on to Algeria, stage demonstrations, attack U.S. buildings in Algiers, and support attempted French military coup.



IN MIDDLE EAST, Lebanese carry open coffin of a murdered pro-Nasser leader, assault U.S. Embassy, and touch off an insurrection against pro-Western Beirut government.

# Anti-U. S.

**Outbreaks in three areas are designed to expose American weakness, and force a summit meeting on Russia's terms.**

Washington is staggering this week from a series of blows at U.S. foreign policy. Sudden explosions of violence in Venezuela, Lebanon, and Algeria (left) have rocked Washington—and forced it toward a reappraisal of its policies in Latin America, the Middle East, and North Africa.

Lumped together, the outbreaks in these three areas constitute a real threat to U.S. leadership in the Western alliance. In two cases—Venezuela and Lebanon—the Communists clearly played the instigating role, with the goal of exposing American weakness and forcing a summit meeting on Soviet terms.

Taken separately, each incident has a special impact:

- The Caracas outburst against Vice-Pres. Nixon adds up to a challenge to the U.S. in dealing with countries right in its own backyard.

- The insurrection against the pro-Western government in Lebanon has sent the U.S. Sixth Fleet steaming to the eastern Mediterranean—and may lead to a tougher U.S. policy in the Middle East.

- The attempted French military coup in Algeria will force France to a decision on North Africa, either toward a negotiated settlement or toward all-out war against Algerian nationalists. If France takes the latter course, the U.S. will have to make a choice—between France and North Africa.

## I. Violence in Latin America

Nixon's 18-day visit to South America started as a fact-finding goodwill tour.

It turned into a series of violent attacks against Nixon personally—and against what Latin Americans consider basic, longstanding errors in U.S. policy toward its backyard neighbors.

Small but efficient Communist groups, in a continent-wide campaign masterminded by Moscow, started the anti-U.S. riots. Their success in staging riots was possible only in the existing atmosphere of deep-seated, widespread discontent over Washington's handling of affairs with Latin America.

- **Indifference**—The basic trouble, as seen by our neighbors to the south, is the often indifferent attitude of the U.S. toward Latin political and economic problems.

On the political side, Latin leaders

# Riots Rock Our Foreign Policy

have favored Washington's policy of nonintervention. But they feel this policy has gone too far—to the point where we passively accept, and often appear to aid, Latin dictators. In Peru, Colombia, and Venezuela—three countries that have overthrown dictators in the past two years—liberal-minded leaders believe they have moved their countries closer to the U.S. model of democracy, in spite of U.S. indifference and lack of help.

Most of the countries believe that Washington has either ignored or misunderstood their economic aspirations. In their view, the U.S. has focused its attention primarily on Western Europe. That was fine right after World War II, when Latin countries could ride along on huge dollar reserves accumulated from U.S. wartime purchases of Latin commodities.

Now reserves in most countries are hitting rock bottom. Sales to the U.S., the No. 1 customer, are sliding downhill, with stiffer tariffs on metal imports likely. Yet Latin countries heavily depend on income from U.S. purchases to finance their much-needed economic development programs.

- **Latin Gripes**—From the Latin viewpoint, Washington has refused to participate wholeheartedly in the region's economic development. It has relied mostly on private U.S. investments to help Latin America. It has adamantly turned down repeated Latin proposals for a special Inter-American Development Bank and commodity price stabilization schemes.

Latins also feel that the U.S. has guided the Organization of American States along a do-nothing path. More than that, it has appeared to back OAS against the more nationalistic, action-minded U.N. Economic Commission for Latin America (ECLA).

The public reaction here to Latin America's mockery of the Nixon trip might simply aggravate the present deterioration in U.S.-Latin relations.

But it will more likely force a full-scale reappraisal in Washington of the whole Latin scene. During his trip, Nixon already has:

- Spoken out in favor of U.S. participation in a coffee agreement.
- Stated openly his lack of sympathy for Latin dictators.
- **Cures**—Many international observers in this country feel that much of the trouble stems from the need for a broad U.S. program toward Latin America. They criticize the lack of low-interest development loans and exchange programs for Latin students, and advocate that greater care be taken in selecting ambassadors to Latin countries. They

argue that without a basic program, the same outbursts displayed this past week will erupt again—and help open the whole region to increased Communist activity.

## II. Riots in Lebanon

In tiny Lebanon, riots aimed at Pres. Chamoun's pro-Western government—and at U.S. buildings—have raised the broader question of Washington's policy toward the Middle East.

Arab extremists want to pressure Lebanon into joining Pres. Nasser's United Arab Republic (Egypt and Syria). At midweek, there was no clear sign whether Lebanon's anti-Nasser government would be able to resist pressure for a merger. And no one was sure whether the struggle inside Lebanon would reach large enough proportions to bring U.S. intervention under the post-Suez Eisenhower Doctrine. Lebanon was the only Arab country to accept the doctrine.

But two things seem clear:

- If Lebanon goes, the new Iraq-Jordan federation will not be able to maintain its pro-Western stand as a counterbalance to Nasser's United Arab Republic—not without war.

- The Lebanese government will hold out as long as possible—what with Pres. Chamoun's firm stand against any merger of his country with the United Arab Republic.

- **Washington's Stand**—Washington doesn't want to stand alone in dealing with the situation, if called upon to do so. It would like United Nations' backing. Events may move too fast for Washington to bank on U.N. action—especially since the Assembly is not in session and the Soviet Union, in the Security Council, would undoubtedly veto collective action.

Washington, for several reasons, would like to postpone as long as possible any definite steps in helping solve the crisis. So far, there's no clear-cut evidence that Nasser started the uprisings in Lebanon. In fact, experts argue that it's unlikely that Nasser, now visiting the Soviet Union, would have ordered the uprising at this time. Thus, the Lebanon outburst may be a somewhat spontaneous reaction against last week's assassination of a pro-Nasser leader in Lebanon. And the guiding hand, if there is one, may be Moscow's.

- **Cairo Approach**—There's no doubt that Washington would rather try to negotiate with Cairo than intervene directly in Lebanon. Only a few weeks ago, after Nasser agreed on compensation for nationalizing the Suez Canal, the U.S. began making gestures toward

renewing friendlier relations with Cairo.

To intervene directly in Lebanon would hurt Washington's new effort in dealing with Nasser. More important, it might force a real showdown in the Middle East—something more critical than last year's crisis over a Communist coup in Syria.

## III. Crisis in Algeria

The drawn-out Algerian crisis, which has poisoned France internally and in its relations to the West, came to a head this week. In a not-unexpected but sudden move on Tuesday, Gen. Massu in Algeria unseated civilian authorities and established military control in the capital city of Algiers. Then, on Wednesday, he reportedly backed down to the Pflimlin government in Paris.

His coup may serve as a catalyst to:

- End the hopeless parliamentary stalemate in Paris over methods of solving the Algerian crisis.

- Test for once and all the ability of the Fourth Republic—established by France after World War II—to cope with the country's basic problems.

- Push Washington off the fence and force it toward a definite stand on whether or not to support Algeria's move for independence.

- **Alternatives**—Any French government now has two choices. It will have to move directly toward a negotiated settlement over Algeria. Or it will have to follow a policy of all-out war in North Africa.

At midweek, the situation was up in the air, but there was one bright sign: The French parliament recovered fast from Massu's coup. It invested Pierre Pflimlin as new premier. More important, it was strong enough to beat down what was meant to be a rightist coup in Paris, paralleling the military coup in Algeria.

- **Critical Decision**—The biggest problem now is how to reestablish constitutional government in Algeria. Paris can hardly use force. Behind Massu are his own elite paratroopers—and a good part of the French population of Algeria. If the French government, through army generals loyal to Paris, cannot persuade Massu to take orders from Paris, there's a chance that Pres. Coty will be forced to call on Gen. de Gaulle as an arbiter and appeaser.

Hedging and temporizing on Algeria seem over for Paris—and for Washington, too. Washington must now resolve the question of whether to oppose France openly on North Africa, at the risk of crippling NATO, or back France, with the chance of losing prestige and influence on the African continent.



# Tax Changes That Congress Is

For a quick boost  
to business

To help distressed  
industries

To tighten and  
clarify the law

For permanent  
tax reform

## These taxes ... Could be changed like this ...

## At this revenue loss.

<b>PERSONAL INCOME</b>	Ideas range from rate cuts to forgiveness of withholdings, and for periods of from three months to a year.	From \$3-billion to \$8-billion, depending on which plan.
<b>CORPORATE INCOME</b>	Allow faster depreciation on plant and equipment ordered after Jan. 1, 1958, and before June 30, 1959.	From \$600-million to \$1-billion in taxes would be postponed.
<b>AUTOMOBILE EXCISE</b>	Present 10% tax on manufacturer's price could be allowed to die June 30 or extended at a lesser figure.	\$800-million, if tax is allowed to expire altogether.
<b>FREIGHT EXCISE</b>	Eliminate present 3% tax on freight bills.	\$400-million.
<b>PASSENGER FARE EXCISE</b>	Reduce present 10% rate.	About \$220-million.
<b>CO-OP INCOME</b>	Tighten regulations to tax more dividends given to patrons.	No loss but a gain; proponents say tax revenues would rise about \$500-million.
<b>LIFE INSURANCE COMPANIES</b>	Treasury Dept. backs a broader definition of net income, aimed at increasing revenue.	No estimate.
<b>TECHNICAL CHANGES</b>	House adopted 81 changes, now before Senate Finance Committee. Most are designed to clarify language, end unintended benefits or hardships.	No estimate.
<b>PERSONAL INCOME</b>	Reduce first-bracket rate to 18% and cut taxes in other brackets by 5%.	\$2.5-billion.
<b>PERSONAL INCOME</b>	Raise individual exemptions from \$600 to \$700.	\$2.8-billion.
<b>CORPORATE INCOME</b>	Rep. Howard H. Baker (R-Tenn.) sponsors bill to cut tax by permanently halving the approved useful life of plant and equipment, thus increasing depreciation allowances.	Might postpone about \$500-million of tax payments the first year.
<b>CORPORATE INCOME</b>	Revise Bulletin F, Treasury's guide to approved depreciation schedules, so as to permit more liberal deductions. Treasury can do this without Congressional action.	Effect would be markedly less than in Baker plan (above).
<b>CORPORATE INCOME</b>	Reduce present 52% rate to 50%, or less. If no action by June 30, rate drops back to 47%, but there'll be a showdown before that happens.	\$800-million if rate is cut to 50%.
<b>SMALL BUSINESS</b>	Administration proposal offers fast depreciation on used plant and equipment, more liberal treatment of investors' losses, an option for small corporations to be taxed as partnerships, and up to 10 years to pay estate taxes.	\$140-million in first year.
<b>SMALL BUSINESS</b>	Another proposal would additionally allow up to \$30,000 to be deducted from taxable income for investment in expansion and would allow tax-free accumulation of funds to pay estate taxes.	No estimate.



# To Consider in the Late Stages

How opinion lines up	Chances of action
Favored by Committee for Economic Development and many economists; opposed, for now, by Administration.	Slim, unless business gets worse before Congress goes home.
Sen. Homer Capehart (R-Ind.) introduced the bill; the Administration is studying depreciation.	None, unless the Administration decides to back it strongly.
Wide support in Congress to help auto sales. Administration has asked extension at 10% rate.	Good, for elimination or cut of tax if Administration says yes.
Supported in Congress as way to aid hard-hit railroads; has general business backing.	Improving.
Transportation groups are pushing for action; idea hasn't caught on yet in Congress.	Less than for other excise cuts.
Treasury Dept. is in favor, and so are small business groups; some, but not all, farm co-ops are opposed.	One of few revenue-increasing proposals with even an outside chance of adoption.
Backed by tax experts on House Ways & Means Committee but with little rank-and-file support.	Slim, with little pressure for it.
Some businessmen and tax experts want changes; revision lacks strong Senate support, but hearings are being held.	Better than even.
Rep. Robert W. Kean (R-N.J.) sponsors the bill. Lower-bracket relief has support among Democratic leaders, and Treasury prefers it to higher exemptions.	A likely method, but only if sentiment for general tax cut rises.
Sen. Paul Douglas (D-Ill.) and other Northern Democrats favor this approach; Treasury dislikes it.	Democratic rank and file backs it, and it has a chance in any general cut.
Widely supported in Congress, but also politically unpopular with many lawmakers. Administration prefers it to an outright tax cut. It has support from businessmen, even those who oppose a general tax cut.	Idea has a lot of quiet support as a long-run growth factor, and it might go through as part of a broad package of tax cuts.
Treasury has been three years studying Bulletin F. Tax experts and businessmen have been pressing for years for liberalization.	Treasury isn't likely to grant more liberal treatment, unless to forestall more extreme action by Congress.
Favored by many business groups but lacks political backing in Congress. Administration approves as aid to new growth cycle but is on record for extension of 52% rate.	No better than 50-50, and then only as part of a general cut.
White House wants this program, and Democrats are friendly. House Ways & Means Committee starts hearings soon.	Good.
Bill is backed by both parties on Ways & Means Committee and by an array of 60 business groups.	Less than for the more modest Administration program (above).

The calendar is forcing an outcome to the Washington maneuvering over taxes. Some rates, such as the Korea-born excises and the last 5% of the corporate income tax, automatically expire on June 30 if nothing is done. Lawmakers also want to get home and start campaigning for November.

Optimists among Congressional leaders hope to close up shop July 15. But unless a tax program that lawmakers will support takes shape in the next few weeks, there's no hope of a July 15 dismissal time.

The first real step toward a concrete program will be taken next week by the House Ways & Means Committee, which must initiate tax legislation, when it opens hearings on an Administration bill to give special benefits to small business (table).

• **Presidential Speech**—Leaders in both parties are hoping Pres. Eisenhower will help clear the air when he addresses business leaders in New York next Tuesday. They expect, however, only a statement of confidence about business, a new warning against general tax reduction, a friendly word for tax changes to promote long-term growth, including aid for small business and perhaps more liberal depreciation allowances.

Whether or not Eisenhower is explicit about what kind of tax change is needed, Congressional leaders and the Administration will apparently continue their past three months' working agreement on tax policies. Democratic leaders of Congress have been going along with the Administration's desire not to give the economy a shot in the arm by a tax cut until the need is clear beyond dispute.

This has kept the lid down on proposals for a broad, general tax reduction. But the lid is going to have to be lifted a bit, in order to beat the June 30 expiration date of the excises and the last 5% of corporate income tax. Neither party wants such a wholesale drop in these taxes, so there will have to be continued cooperation, plus some give and take.

• **Holding the Reins**—The problem faced by House Speaker Sam Rayburn, Ways & Means Chmn. Wilbur Mills, and Treasury Secy. Robert B. Anderson is an old one: Once tax legislation starts on its way through Congress, the iron discipline of the committee system is weakened, and the possibility of amendments from the floor must be considered.

Anderson and the House leaders fear that the general tax cut bloc, headed by Sen. Paul H. Douglas (D-Ill.), will seize control when their bills reach the Senate

and will push through reductions much larger than anything Ways & Means is likely to report out.

Douglas seems already to be paving the way for such a drive. Last week, as chairman of a subcommittee on fiscal policy of the Joint Economic Committee, he sent all members of Congress a summary of the views of 28 leading economists, leaning strongly toward a general reduction, including slashes in excises and in personal and corporate rates (BW—May 3 '58, p. 27).

Rayburn, Mills, and Anderson and their supporters are trying to work out a new phase of strategy to counter the bloc that favors a general cut.

- **Half a Loaf**—The present plan is to offer Congress a series of limited tax cut proposals over the coming weeks, staving off a final decision either way on general reductions until practically the eve of adjournment. By that time they hope signs of economic upturn will show clearly that no big tax cut is needed.

The relief package for small business is first on the calendar. It has a good chance of being adopted, though attempts will be made from the floor to expand it still further.

- **Excise Taxes**—By the time excise tax extension comes up in committee, probably late this month or early in June, the Administration and Democratic leaders may be in agreement on lowering the taxes on autos and freight bills. Such a cut wouldn't cost the Treasury much revenue, and it would help two industries that are hit particularly hard by the recession—the auto industry and the railroads.

Spokesmen for both industries say they would make every effort to pass the saving along to their customers. However, the most the auto makers can do is pass the saving to distributors and dealers—under antitrust laws, they have no power to force the dealers to pass the tax cut on to the car buyers. Railroads agree that the 3% freight tax would be passed along to shippers, but some admit they would be tempted to absorb the 10% tax on passenger tickets by raising fares if it is cut or wiped out.

Auto executives are strong in their call for removal of the 10% excise on their product. "It makes no more sense for the federal government to tax a man for buying a new car than it would to tax him for buying a new house," says Chrysler's Pres. L. L. Colbert. Pres. Henry Ford, II, of Ford Motor Co. points out that the excise tax was "an emergency measure to cut down demand at a time when it was in the national interest to do so" and its removal would be "only simple justice." Autos, he says, are "a necessity—not a luxury."

There's practically no possibility of a reduction of some excises, such as those on liquor, beer, wine, and tobacco, but

an attempt will be made to lighten the load on auto parts and accessories, appliances, radios, TV sets, and business machines, as well as passenger fares. Makers of most of these products say they would pass tax savings along to the consumer.

- **Corporate Tax**—The question of lowering the corporate income tax rate will be threshed out at the same time as the excise issue.

There's sentiment for lowering the rate to 50% on the grounds that the present 52% is simply too high for healthy long-range growth of the economy. But the problem here is political. If the rate is shaved, that would give the general-cut bloc a prime argument for cutting taxes for individuals, too. Rather than invite such a maneuver, leaders plan to ask for straight extension of the 52% rate, with a reduction still possible later as part of a general slash.

- **Depreciation Write-Offs**—Some liberalization of depreciation allowances ranks high with leaders in both Congress and the Administration. Relief for business appears to be less vulnerable politically in this form than in a reduc-

tion of the income tax rate. That's partly because of concern over small business.

Key legislators are convinced that bigger deductions for depreciation help small businesses to grow into larger businesses, thus providing more jobs—and more taxable earnings. Chmn. Mills argues strongly for this view.

- **Business Advice**—Depreciation relief got a strong plug at last week's meeting of the influential Business Advisory Council of the Commerce Dept. Commerce Secy. Sinclair Weeks reported that the council, made up mostly of heads of large corporations, was about 3 to 1 opposed to general tax reduction right now as a recession cure. In private conversation, the group almost to a man backed more leeway for business in taking depreciation allowances, and many members also supported lower excises on autos and freight charges.

The council's special anti-recession committee said it would favor a general cut in personal income taxes "at some future date if the decline in general consumption continues." It divided on whether the corporate rate should also be cut if the recession should deepen.

## Reactor Row Is Sizzling Again

AEC's request for funds for only one large power reactor stirs Congressional Democrats to push their own broad program for federally built reactors.

The Atomic Energy Commission and Democratic critics of its atomic power program are squaring off for the most bitter battle yet in the fight over federal vs. private construction of reactors.

This time, the Democrats, who favor more federally built atomic power plants, are odds-on favorites to win.

The atmosphere is thick with resentment and animosity as the Congressional Joint Committee on Atomic Energy opens its hearings into AEC's budget requests for acquisition or construction of plants and facilities.

- **AEC Request**—The \$193,379,000 request includes strictly military projects, and routine expansion and modification of AEC atomic power research projects.

But the spotlight—and Democratic ire—centers on the interest, or lack of it, in civilian atomic power development shown by AEC Chmn. Lewis Strauss. The Administration bill would authorize only one large reactor—a \$51-million gas-cooled, graphite-moderated prototype fueled with partially enriched uranium. However, even this project would not be undertaken by the government until private industry is given a chance to turn it down.

- **Among the Missing**—Conspicuously

missing is another reactor project Congressional Democrats had been expecting: a heavy-water-moderated prototype burning natural uranium. Another project advocated by the Democrats but not included was a plutonium-producing reactor for which a design study already has been carried out.

As a result, the Democrats are mounting a major offensive to send to the White House a federal reactor construction bill that could cost four or five times more than Strauss' request for his one power reactor.

- **Disputed Agreement**—At the suggestion of Chmn. Carl Durham (D-N. C.), representatives of the Joint Committee and AEC opened negotiations last fall to try to reach agreement on a common approach.

They reached agreement on construction of the gas-cooled and heavy-water-moderated types—both of which some experts believe hold promise of ultimately producing economic power. The Democrats profess surprise and indignation at the total absence of the heavy-water moderated reactor and AEC's refusal to go ahead immediately with the gas-cooled reactor on its own.

AEC sources, however, contend that

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the agreement never was as firm as the Democrats claim.

- **Democratic Program**—The Democratic-led Joint Committee is expected to approve a program that includes these projects:

- **Plutonium producer.** The Democrats on the Joint Committee want AEC to build a \$126-million special plutonium-producing reactor at its Hanford (Wash.) installation. They might also propose that generating facilities with a capacity of 300,000 kw. be hooked up with the reactor. AEC contends it has enough capacity for producing plutonium to meet military needs, and can meet additional requirements by buying plutonium produced as a byproduct in European and American power reactors. Democrats scored an advantage last week when Defense Dept. spokesmen testified plutonium production must be expanded.

- **Heavy water reactor.** Democrats

point out that the AEC itself listed this reactor type in 1956 as one that should be built by the government if private industry failed to show sufficient interest. AEC has not yet received satisfactory industry proposals.

- **Water reactors.** Construction of large, advanced type of boiling water or pressurized-water reactors may be proposed by the Joint Committee, too.

- **Long-range program.** The Joint Committee, the AEC staff, and many industry spokesmen have suggested that a five- or 10-year program of atomic power plant construction be laid out to clear up confusion and uncertainty within industry. A majority of AEC commissioners, however, feel it's too early to be tied to a timetable. So, the Joint Committee will name a blue-ribbon advisory committee of outside experts whose thinking is close to the committee's to come up with proposals next year for a long-range program.

## U.S. Gets Atomic Partner

**Agreement with Euratom on joint development of nuclear power gives West Europe financial backing and technical knowhow, and the U.S. a market for reactors.**

A concrete plan for international development of nuclear power got off the launching pad last week. The U.S. agreed on a broad program of financial and technical cooperation with the European Atomic Energy Community (Euratom), which pools the nuclear power development efforts of France, Germany, Italy, Belgium, Holland, and Luxembourg.

The agreement calls for a joint effort to build six or seven large nuclear power plants in Western Europe over the next five years, with a total capacity of 1-million kw. This will be the first step toward meeting Euratom's major goal of 15-million kw. of atomic power capacity by 1967.

More important, it paves the way for a close partnership in atomic power between the U.S. and Western Europe:

- For the U.S., the agreement means important markets for power reactors now which may eventually produce licensing deals, and a chance for the U.S. industry to gain experience with commercial-size nuclear power operations years before nuclear power is likely to be competitive in this country. The initial plans call for nearly \$150-million worth of U.S. reactors and other equipment. The longer-term program may require over \$500-million worth. U.S. industry also will have access to the fruits of Euratom's proposed \$168-million research and development program on the industrial applications of atomic energy.

- For Europe, cooperation with the U.S. will save precious time in the development of power reactors, and will speed up training of atomic engineers and technicians. The participating countries also will avoid the heavy capital investment burden involved in such a program.

- Euratom estimates that Western Europe's bill for imported fuels will triple by 1975. This would put unbearable strains on the already overstrained balance of payments, and make Europe totally dependent upon the politically unstable Middle East. The Euratom program calls for stabilizing fuel imports at their 1963 levels.

- **Long-Term Financing**—Under the draft signed this week, the U.S. will finance on a long-term basis the purchase in this country of roughly \$130-million worth of boiling water and pressurized water reactors. Total cost of plant and equipment will be about \$350-million. The U.S. also will finance over a period of 20 to 25 years the purchase by Euratom of about \$100-million worth of enriched fuel. The Atomic Energy Commission will provide technical aid, including the training of European engineers.

- **Congressional O.K.**—The U.S. contribution is likely to come from the Export-Import Bank, rather than from Congressional appropriations. But Congressional action will be needed on two specific aspects. First, to satisfy the requirements of the Atomic Energy

Act of 1954, Congress will have to recognize Euratom as a sovereign governmental entity with which the U.S. can enter into executive agreements. Second, Congressional approval will be needed for the sale of approximately 33 tons of uranium 235 that will be needed as fuel.

The Administration sees little difficulty in clearing these problems. The Joint Committee on Atomic Energy and congressmen in general have encouraged international atomic cooperation. The draft agreement now is in the process of receiving final Euratom approval. As soon as that is done, the Administration will send its proposals to Congress, probably in the early part of next month.

- **Concessions**—The U.S. made important concessions during the negotiations period. It agreed to sell Euratom enriched fuel on credit instead of leasing it, as in the past. The treaty requires Euratom to own all fuel used under its programs, in the hope that the community will exercise real federal authority over its members.

The U.S. also gave ground on the touchy question of the inspection and control measures to be taken to prevent diversion of nuclear fuels to military uses. The more lenient procedure that has been applied to Britain and Canada will be followed. In essence, this means that Euratom will do its own policing under standards agreed to by the U.S., although U.S. observers may be invited to participate. Euratom insists upon this arrangement in order to strengthen its claim to being treated as a major sovereign governmental power.

- **High Yield**—The agreement is a big step toward European economic and political unification—long a key objective of the U.S. State Dept. It assures that, in the nuclear field at least, this unification will go forward within a framework of transatlantic cooperation, rather than as an isolated and potentially competitive development. Finally, the agreement is the most concrete expression yet of Pres. Eisenhower's Atoms for Peace program.

The joint program has one other feature. It will require more intimate teamwork between private industry and government on both sides of the Atlantic than ever has been undertaken before. Existing public utility companies—some privately and some publicly owned—in the six European countries will actually build and own the nuclear plants, with financial and technical help from Euratom. U.S. companies will supply reactors and technical knowledge at least in the early stages. Both European and American companies will work closely with Euratom, with its member governments, and with the AEC.





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# In Business

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## 10% Increase in Housing Starts This Year Predicted by Builders and Government

Private homebuilders are joining federal housing officials in predicting that private starts this year will jump 10% above the 1-million mark in 1957. The optimism is based on the effects of easier mortgage terms in the housing law that went into effect Apr. 1.

Since then, applications have skyrocketed for FHA insurance and VA guarantee of mortgages. During April, there were nearly 80,000 applications for FHA loans on new and existing houses, making it the second biggest month on record. In the VA program, the 24,800 April applications nearly tripled the March figure.

As a result, housing chief Albert Cole asked Congress to rush through an additional \$4-billion insurance authorization for FHA, with other \$4-billion boosts in each of the next three years. In March, Cole had asked for \$3-billion boosts, on a four-year basis. Now he says that without the extra money and extra speed, FHA's well will run dry within 30 days.

Housing experts doubt that the big rise in government-backed mortgages will bring a balancing shrinkage in conventional mortgages. On the contrary, they expect the general momentum will cause a slight increase in conventionally financed housing starts.

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## Gadsby, SEC Chairman, Nominated For Five-Year Additional Term

Edward N. Gadsby, chairman of the Securities & Exchange Commission since last August, has been nominated by Pres. Eisenhower to a five-year term on the SEC. If the Senate confirms the appointment, Gadsby will continue as chairman.

Before coming to Washington, Gadsby was a leading lawyer in Massachusetts and had served as general counsel to the state's Dept. of Public Utilities.

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## Du Pont Offers to Give Up Voting Rights on Its GM Stock

Du Pont made its second try this week at working out a plan to dispose of its 23% interest in General Motors. Its new proposal is markedly different from its original plan and goes to some lengths to meet the Justice Dept.'s objections. In effect, du Pont plans to keep its GM shares, but would consider them in the same way that an investment company treats its holdings.

The government had its own plan for disposing of the stock by selling it to du Pont shareholders over a 10-year period (BW—Nov. 2'57, p52). In making its new proposal, du Pont pointed out that, according to an Internal

Revenue Service ruling, distributing the stock under the Justice Dept.'s plan would make sales taxable as ordinary income and might mean a \$5-billion loss to GM and du Pont shareholders.

Terming this a "harsh, unreasonable and wholly unnecessary" penalty, du Pont offered to transfer the right to vote its 63-million shares of GM to du Pont's stockholders on a pro rata basis. It also calls for Christiana Securities Co., and Delaware Realty & Investment Co., which own 29% of du Pont, to transfer their pro rata rights to vote GM shares to their stockholders.

To meet another antitrust argument, the plan offers to foreclose du Pont and GM from having any directors in common, except with specific court approval.

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## Deferred Bonus Plan Payable in Stock Ruled Out by Court as "Irrational"

Many of the executive profit-sharing or bonus plans based on payments in stock came under a sharp legal threat this week, when Federal Judge Charles J. McNamee in Cleveland called a halt to the program of Consolidation Coal Co. (formerly Pittsburgh Consolidation).

The Consolidation plan, like many others, involves a bonus in stock with delivery withheld until the executive retires. The executive then has the option of taking the stock or the cash value of the stock at time of delivery. If the value of the stock has risen in the interim, the bonus might prove to be much greater than its theoretical value when it was first awarded.

But, said McNamee in the Consolidation case, there is no necessary connection between the executive's worth to the company, and the later rise of the stock. Hence, said the judge, the plan was irrational and enriched the executive beyond the value of his services.

Consolidation is expected to appeal the ruling, which came in a stockholder suit.

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## Recession Notes . . .

Pipe smoking, which in times of recession usually gains ground relatively to the more expensive puffing of cigarettes, is doing it again, says the Internal Revenue Service. IRS reports shipments of pipe tobacco in March were 6,417,113 lb.—more than 1-million lb. above the year-before month. But taxes were paid on only 32.9-billion cigarettes this March, compared with 33-billion the year before.

Until times get better, Warner-Lambert Pharmaceutical Co. has no intention of going through with a rumored stock split, says Chmn. E. H. Bobst. It would be foolish, Bobst told the annual meeting, to split the stock without raising dividends, and it would be unwise to raise dividends at a time like the present.

## . . . And Inflation Item

The cost of informers is going up, at least in North Dakota. The state's Stockmen's Assn. has boosted to \$1,000 the reward for information leading to the conviction of a cattle thief. It seems the old \$500 was no longer enough to make people talk.



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Designed like a printing press, the **BDC Rex-Rotary M-4** is built for clean work and clean worker. Gone are the liquid ink and the old fashioned leaky drum. In their place, paste-ink that feeds from an ever-sealed, disposable cartridge. Results? Clean, sharp impressions; clean, happy operator. No other mimeograph at anywhere near its price offers so many superiorities as the M-4. Fill out the coupon for a demonstration in your own office.

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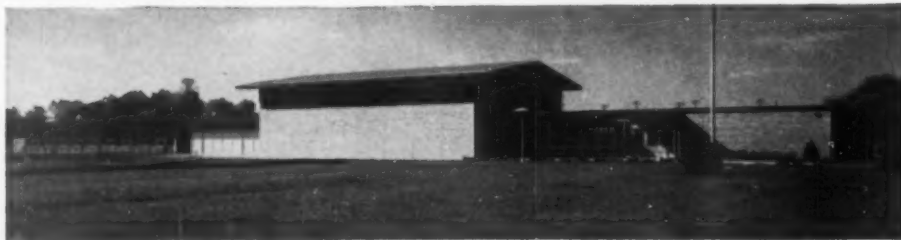
City ..... State .....

# because taxpayers "specified" low maintenance costs

for these new schools in the greater Detroit area . . .

**Jenkins Valves** were selected for long-range economy

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five school buildings:  
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Chief Mechanical Engineer:  
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**Midvale  
Elementary School**  
Birmingham, Mich.  
General Contractor:  
Freeman Darling Company  
Mechanical Contractor:  
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**Lederle  
Junior High School**  
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General Contractor:  
Alfred A. Smith  
Mechanical Contractor:  
J. P. Davis Co.



**Eleanor Roosevelt  
Elementary School**  
Oak Park, Mich.  
General Contractor:  
Darin & Armstrong  
Mechanical Contractor:  
J. P. Davis Co.



**John Dewey  
Elementary School (two units)**  
Oak Park, Mich.  
Unit 1. General Contractor:  
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Atkin-Fordon Co.  
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E. E. Lynch Co.



**Waldo E. Lessenger School**  
Oak Park, Mich.  
General Contractor:  
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Second only to the need for five new schools in the greater Detroit area was the importance—as in *any* community today—of saving taxpayers' dollars. Jenkins Valves in school buildings not only have added a *fourth* R—Reliability . . . their economy of maintenance and long operating life help taxpayers save money.

Confidence in the extra measure of efficiency built into Jenkins Valves is shared by leading architects, engineers, and contractors in every field of construction. Yet these valves *cost no more*. Jenkins Bros., 100 Park Avenue, New York 17.

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# WASHINGTON OUTLOOK

WASHINGTON  
BUREAU  
MAY 17, 1958



## Watch for a Washington move to stimulate capital spending.

Plans still aren't firm. But among the Eisenhower advisers who worry about how to help get business pointing up, you hear lots of talk about "investment incentives." There seems to be general agreement that easier credit and the coming rise in government spending won't do the whole job. A rise in private spending for plant and equipment is considered necessary. The question is how to bring this about.

## The most talked-of plan is liberalized depreciation (page 40).

**Here's the pitch:** As of now, a company is limited on how fast it can charge off capital outlays as a cost of doing business before figuring its taxable profit. General guidance is spelled out in the Treasury's Bulletin F. This handbook rigidly specifies the number of years in which any particular type of building or machine can be written off for tax purposes. The theory now advanced is that more freedom for management to decide how long to take for depreciating plant and equipment costs would encourage capital spending, thus give the economy a long-term boost.

**The big question: How to do it? The Treasury can change the depreciation rules.** The law gives the department considerable leeway in determining the useful life of buildings and machines. Revision of Bulletin F is under consideration.

**But the Treasury is reluctant to move** without action by Congress. In the first place, there would be a temporary loss of revenue. But also important is the fact that any liberalization would bring a storm of criticism from Democrats in Congress. After all, there are many members who still refer to the 1954 concessions as favoritism to "big business." Those are the reasons why the Treasury has held off on any action on revisions proposed by its own Internal Revenue Service.

**Odds are there will have to be legislation.** This would let the Treasury off the hook. It would be "following orders."

**Commerce Secy. Weeks wants liberalization.** He sees this as the "biggest shot in the arm" that government can give to heavy industry—sees it as much more important than general tax cuts.

**Treasury Secy. Anderson leans toward changes.** He's pictured by those who have talked with him on the subject as "very sympathetic." But he wants Congress to vote the changes.

**And there's strong support among businessmen.** This was very evident at the recent meeting of the Commerce Dept.'s Business Advisory Council. Secy. Weeks got the impression all members favored this, even though a strong majority opposed a general tax cut.

**How far might Congress go on depreciation?** You can only guess at this time. Plans aren't firm. But proposals range from complete freedom for businessmen to write off new plant and equipment at any rate they choose to only moderate changes in present policy. One idea that figures prominently in current conversations would instruct the Treasury to set up what's called a bracket system. Under this, a machine that now has a useful life of, say, 10 years would be given a useful life of 5 to 10 years. The owner

# WASHINGTON OUTLOOK (Continued)

WASHINGTON  
BUREAU  
MAY 17, 1958

would then make his own decision as to how many years of useful life, within this range, are best suited to his purposes.

**Depreciation changes wouldn't be temporary**—would not be voted merely as an aid to recovery from the recession. Congressional and Administration circles talk of "permanent reforms."

**What are the chances in Congress?** They are considered pretty good. Some Democrats will try to picture any liberalization as a revenue "give-away" to business. But the prospect is that if the White House gives strong backing to a bill, there will be enough Republican and conservative Democratic support to put it over.

**Treasury-Congress negotiations are under way.** Secy. Anderson has an agreement with Democratic leaders that he will keep them informed on any tax plans the Treasury may come up with. Right now, the prospect is for piecemeal tax legislation—one bill to extend the rates on corporate income and goods and services that are scheduled to go down July 1; another on excise tax relief, especially on transportation and autos; another to aid small business, and still another to handle the depreciation issue. The effort will be to get advance agreement on each bill, so that the chances of a multi-billion-dollar general tax cut will be minimized.

**Eisenhower shows irritation on constant questions about tax cuts.**

He was a little short with reporters when the question came up this week at his press conference. He gave no information at all. When asked if he would veto an individual income tax cut if Congress should vote one, he referred his questioner to his earlier answers about the agreement with Congress leaders on the tax situation.

**No new public works program is in sight.** Eisenhower's feeling is that the Administration already has O.K.'d the projects that can be undertaken quickly as anti-recession measures. Others that have backing in Congress would take too long to get started, he feels.

**There's talk of a wage-price "freeze,"** but it doesn't seem to have any real support within the Administration.

**What brought it up** was a sentence in a Business Advisory Council committee report on government and business policies that might help shorten the slide and bring an earlier upturn. The report suggests that the President could ask business and labor for a voluntary wage-price moratorium for a year as a way to help stabilize the economy. The suggestion was never thoroughly discussed by the whole BAC. Secy. Weeks regarded it as only an idea that might be considered. Other officials were quick to point out that the President on several occasions has asked both management and labor to show restraint on wages and prices.

**Nixon will gain here at home from his Latin American tour.**

That's the feeling of most Washington politicians, in both parties. The rough treatment he and his wife received in some of the neighboring nations will help his standing here. Feeling is the Nixons handled themselves well.

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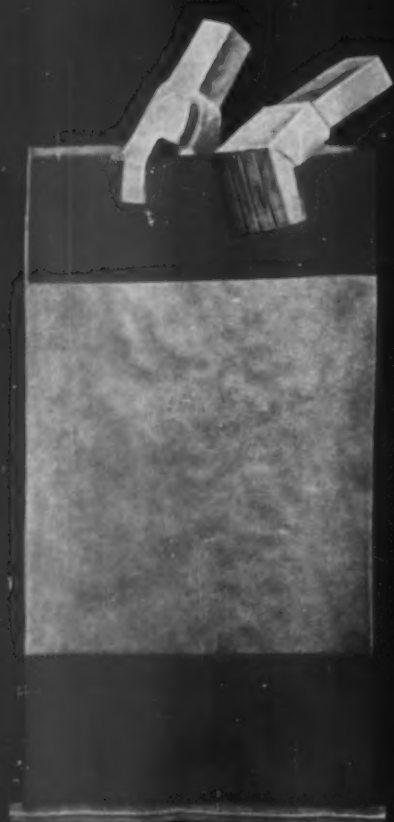


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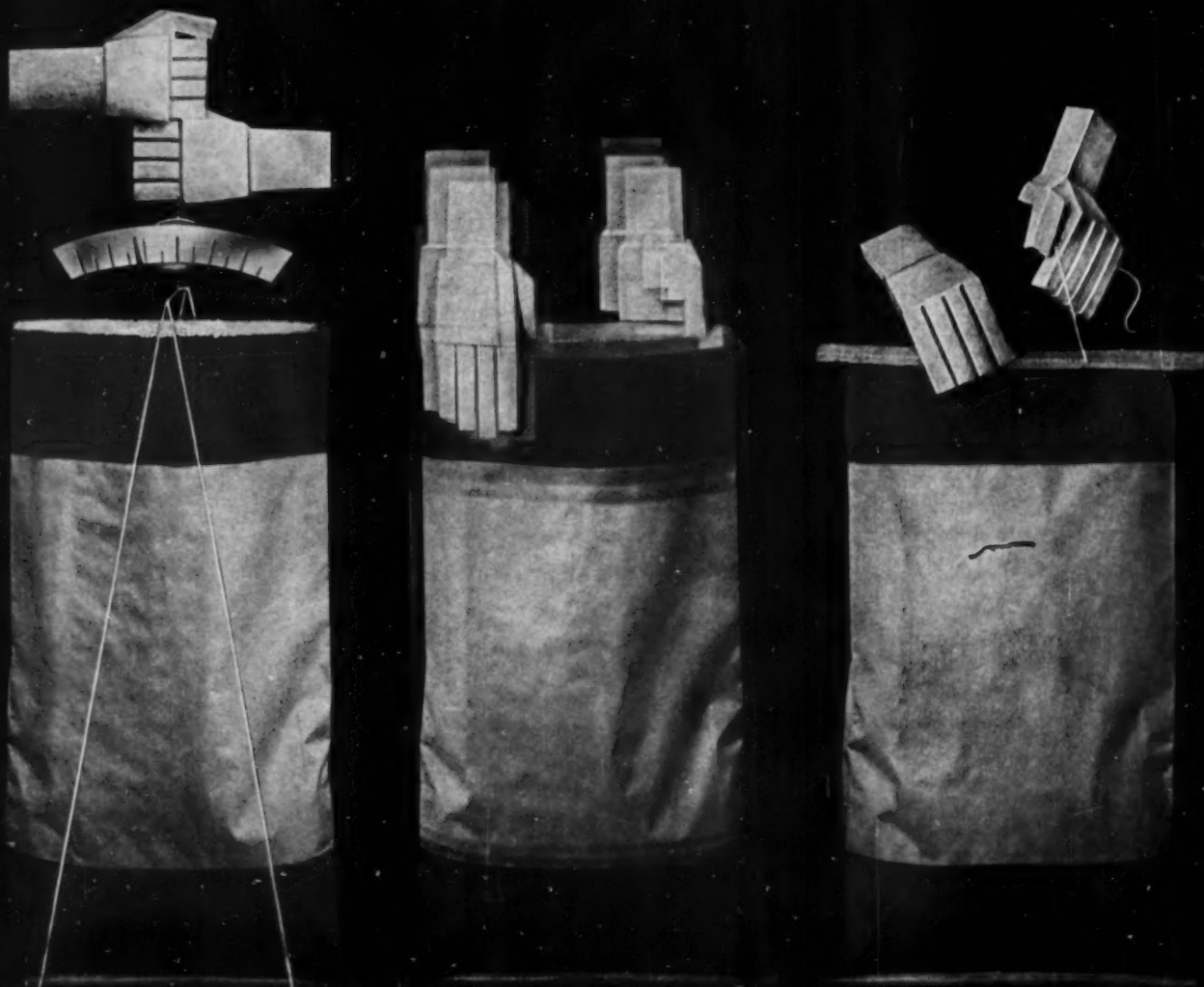


## Six

### St. Regis brings industry another packaging "first"

The first fully automatic multiwall bag-filling machine ever developed... that's the St. Regis Vredomatic. The Vredomatic *positions* the bag beneath the spout, *opens* the bag for filling, *fills* bag to correct height, *weighs* material accurately, *settles* the contents for economical packing, *tapes and sews* the bag mouth...all without help from human hands.





Weighs

Settles

Closes

## operations...no operator!

The Vredomatic is part of a complete packaging service offered by St. Regis. Like all St. Regis developments it was produced to increase efficiency and lower costs. It is typical of the improvements St. Regis has made year after year in multiwall bags, in machinery for bag-making and bag-filling . . . in cartons and containers . . . in plastics for packaging and other industrial uses.

For new ideas, new products or new methods of

packaging, shipping or storing, call "the company that builds its future on service." St. Regis Paper Company, 150 E. 42nd Street, New York 17, N. Y.

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# In Marketing

• • •

## TV Recording on Tape Instead of Film Solves Many Problems, But Creates Others

The recording and broadcasting of TV programs and commercials on electronic tape rather than film has now grown into one of TV's major developments, posing far-reaching changes and problems for the industry. Videotape occupied a prominent place at the National Assn. of Broadcasters convention in Los Angeles last month, just as it did in the spring of 1955 when Ampex Corp., Redwood City, Calif., first demonstrated its videotape recorders. **But a lot of things have happened since then:**

- The three TV networks are using tape to solve the problem of delayed broadcasts necessitated by the various time zones across the country. National Broadcasting Co., for example, has opened a \$1.5-million Videotape Center at Burbank, Calif., which automatically records programs and re-broadcasts them at appropriate times for the Mountain and Pacific states.

- Some 35 TV stations are using or preparing to use tape recording.

- Several companies are ready to produce TV commercials on videotape, with some national advertisers already using tape.

- Radio Corp. of America has unveiled its line of tape recorders, both black-and-white and color.

- Recorders have improved greatly over early models. For example, Ampex machines permit interchanging of tapes, and Ampex has a method of editing the tapes. Regular production deliveries are being made.

Before the introduction of tape, any non-live broadcasts on TV had to be on film. Videotape's big advantages include a superior picture quality and the fact that shows can be put on tape—over long distances—and played back immediately without any processing.

Nobody in the industry can yet foresee all the effects tape may produce. An obvious benefit, in addition to solving schedule problems, is to provide a ready means for storing live shows for future re-broadcast. This has especially important implications for stations.

Tape will have widespread economic effects as well. NBC Pres. Robert Sarnoff, for example, has indicated that the question of the physical facilities needed for producing TV shows is undergoing review.

Problems are already beginning to appear. A big unanswered question, for example, is the matter of union jurisdiction. One strike has already occurred over the issue.

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## All Food Stores Gained in 1957 But Chains Are Growing Faster

Last year was a year of growth for food stores, with sales gains spreading to all segments of the industry. This is the salient fact of Progressive Grocer

## MORE NEWS ABOUT MARKETING ON:

- P. 57 GE Launches Own Recovery Plan.
- P. 62 For Gasoline, Selling Is Hot—But the Customers Are Cool.

magazine's 25th annual survey of grocery distribution.

All grocery stores did \$46.5-billion in sales, up 8.4% over 1956, and accounted for 26% of all U.S. retail sales. The report analyzes these sales in two ways, by (1) store size and (2) chain and independent operated stores.

Supermarkets continued to increase their share of total business, with chain stores, defined as operators of 11 or more units, pushing slightly ahead of independents (10 units or less). Supermarkets, accounting for only 10% of the total number of food stores, took 67% of all sales, compared with 62% in 1957. Of this supermarket business, chain-operated supers had \$16.3-billion and independents \$14.9-billion.

In number of stores, supermarkets increased to 28,800 units, up from 27,100 in 1956 and 16,540 in 1952. Last year, however, saw a decline in new store construction due to tight credit and the mushrooming of stores that has made it more difficult to find desirable sites.

**Though independent food stores, both supermarkets and smaller units, still take the bulk of food sales, chains are growing faster.** Last year, chains increased their sales 9.4%, compared with a 7.8% rise for independents. This gave chains 38% of all food sales, up from 27% in 1956 vs. 62% for the independents.

**Sale of nonfood items in food stores continued strong.** The health and beauty aids category grew to \$925-million, and housewares to \$275-million, giving nonfoods total sales of \$1.2-billion. This is a happy development for food stores, since net profit on sales of such items run as high as 15% compared with 3% or 4% on most standard grocery items.

• • •

## Safeway's Rivals in Trading Stamp War Double The Ante for Foe's Own Scrip

Denver, the scene of one of the nation's hottest trading stamp battles a few years back, is in for another fight.

It started last week when Gold Bond, a Minneapolis stamp company, and Safeway Stores launched a joint promotion. Every Denver household got through the mail a kit containing six certificates good for a total of 450 Gold Bond stamps at any of the 132 Safeway stores in the area. The first week, a housewife gets 50 bonus stamps on her certificate, above what her purchases entitled her to. The next week she will get 60 extra stamps, on up to 100. This spaces the campaign over a six-week period, by which time she is presumably safely in the Safeway fold.

This week, competitors set out to steal the Safeway thunder. Big ads in the Denver Post urged housewives to bring those same Gold Bond certificates to the two local chains served by National Red Stamp Co. and by Pioneer stamps. But the competing chains promised not 50 extra Pioneer or Red stamps for the certificate, but 100.



See your AIM\* . . . Tilo Roofing does . . .

## Steel strapping guards siding finish

Bundles of Tilo colored asbestos siding were coming loose during shipment, fanning and shuffling the sheets and damaging the finish. So Tilo Roofing of Stratford, Conn., called in their Acme Idea Man. He suggested using Acme Steel Strapping and an F-1 push-button strapping machine (Idea No. S2-16).

The F-1 easily handles about 1700 bundles per eight hour shift—it automatically tensions each strap, spot welds the ends together, cuts it without waste, and the predetermined strap tension is always uniform. Now the asbestos sheets no longer fan and shuffle, finish stays perfect, and bundles reach the job site tight and secure.

And as Tilo's production increases, the F-1 has capacity for twice the job it is now required to do.

\*See your Acme Idea Man for suggestions on how to end your packaging and materials handling problems. His experience and his Ideas have saved time and money for thousands of companies. Call or write: Dept BGS-558, Acme Steel Products Division, Acme Steel Company, Chicago 27, Ill. In Canada, Acme Steel Company of Canada, Ltd., 743 Warden Ave., Toronto 13, Ontario.

Acme Idea Man  
A. J. Payne has  
solved a variety of  
materials handling  
problems for many  
companies  
including Tilo.



# STEEL STRAPPING



● Operation Upturn is GE's bet that strong promotion, hard analysis of operations will "accelerate the upturn."

● Symbolized here is King Customer, focus of drive, with ex-Chmn. Philip Reed (right) and C. W. Theleen, GE's major appliance customer relations expert.

● The six-month push is based on belief that "extra value" can woo the customer.



## GE Launches Own Recovery Plan

During the next six months, General Electric Co. will be putting all its resources into what may be the company's stiffest test of the postwar period. By the end of this week, the far-flung corporation hopes to be on its way toward making a slogan—Operation Upturn—pay off in more sales, more jobs, and in long-term improvements in every part of its operations.

• **Companywide Job**—At this stage, it is easier to say what Operation Upturn is not than to describe in much detail what it is. Under its decentralized form of management, GE has thrown to the operating departments the job of putting the program into concrete terms. But according to Chmn. Ralph J. Cordiner, the idea is "to concentrate on giving customers the best service and the best reasons to buy they have ever had."

Translated into operating terms, this means that all functions of GE—manufacturing, engineering, finance, public and employee relations, and not just marketing—are getting the job of making sure customers are being satisfied.

• **Customer Reigns**—Coming from GE, which prides itself on being a customer-minded firm, this may sound strange. But Cordiner thinks that now, more than ever before, "King Customer needs some constructive attention."

One thing about Operation Upturn is certain. It has the full backing of Cordiner and Robert Paxton, GE's new president. Cordiner has aligned himself on the side of those businessmen who

admit the seriousness of the recession for some parts of the economy, but think it is possible for business itself, without major government action, to bring about an upturn.

• **Out on a Limb**—To back up that stand, GE's top management admittedly climbed pretty far out on an economic limb, when it announced the Operation Upturn program with considerable fanfare at the annual meeting in Schenectady.

Cordiner admitted to stockholders then that the first-quarter results were "matters of serious concern," with sales off about 8% and profits about 23%. But he noted some improvement that "could well turn into a definite trend, and then snowball into a steady recovery if every person in business and industry will join in a fresh, concerted effort to go after orders."

• **GE's Decision**—Actually, for the better part of a year, GE has been conducting a "thorough review of all operations, expenses, and budgets to discover and eliminate any activities of doubtful value," says Cordiner.

But by March, GE became convinced that the worst of the recession was over and the time was ripe to assure customers that this is the best time to buy. At a meeting of top executives, along with marketing services and employee and public relations, it was decided to put this conviction into some form of corporate action.

J. Stanford Smith, manager of public and employee relations communica-

tions, says: "We wanted an umbrella, a common slogan to focus all the company's activities on this major commitment."

The upshot was formation of a companywide planning council to coordinate the job. In addition, each of GE's more than 100 departments and divisions have appointed parallel councils with chairmen reporting to group executives on plans for promoting "extra values" during the customer-oriented half-year drive.

• **Guide Lines**—Thus far, there are only bare outlines of what may result from Operation Upturn. But to keep the program in focus, the central council under Smith's chairmanship has issued some "guide lines" which chiefly caution against misinterpretations of the program.

For one thing, GE insists that it is not a device to promote broad price-cutting or inventory liquidation. In fact, GE says price levels are already in line, and so are inventories. Operation Upturn also is not to be billed as "fighting the recession"; rather, the theme is to help "accelerate the upturn in business."

Probably most important, operating departments are admonished not to use patriotic themes, such as "Be Patriotic—Buy Now"—schemes that Cordiner has characterized as a "transparent attempt to persuade people to buy things they don't want simply because it is supposed to be the 'patriotic' thing to do."

"We don't want to be in the posi-



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tion," says Smith, "of telling customers it is their patriotic duty to buy. We think we can prove that we can give them extra values that suit their needs. Customers don't exist for us; we exist for them."

• **Local Responsibility**—Beyond this—plus making available common promotional material and exhorting operating departments to enlist all the enthusiasm of dealers, distributors, communities, and employees—the details of Operation Upturn are left to local managers.

Throughout the six-month drive, they are expected to examine closely all parts of their operations that affect sales—product features, quality, delivery, style, availability. Price is mentioned as one area for investigation in this department-by-department analysis, but any adjustments are supposed to be the result of basic improvements in products or operations that will "add extra value" or reduce costs—such as a plan already in the works by one department to repackage a product into multiples of six as a way of reducing handling charges.

• **Sales Support**—GE says that liberal credit terms will "form a dramatic part of the program." This fits into management's belief, that the consumer has the money and, with credit paybacks outstripping new debt, is ready to spend. General Electric Credit Corp. financing will be used for an installment plan under which initial payments are delayed and buyers who lose their jobs are allowed to skip payments for three months. These terms apply to both competitive and GE products.

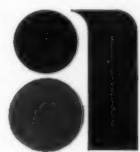
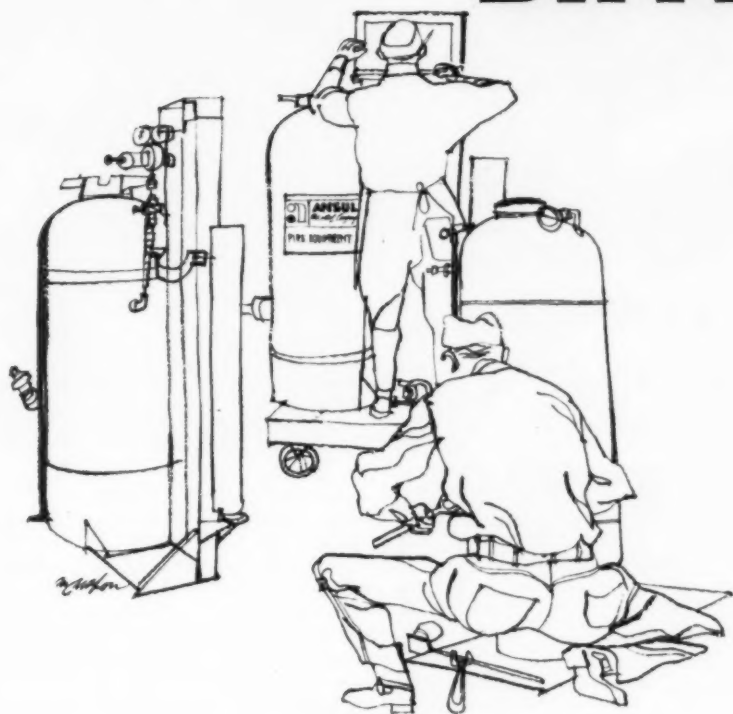
Easier credit terms—with the built-in protection features in case of layoffs—were tried out on a test basis by GE's Hotpoint division in Chicago with its "O.K., Ike" campaign. That turned out successfully enough for the division to enlarge the drive to other cities.

Despite the fact that Operation Upturn's goal is to involve everybody in the company, there will undoubtedly be a lot of hoopla in various divisions. In the Appleton, Wis., trading area, for instance, General Electric's major appliance division has joined with the utility in a major promotion that avoids "was-is" price advertising, but comes down heavy on the theme that appliance values are best now, so customers "better buy now." Mystery shoppers call on stores and those salesmen who throw a good pitch can win a prize.

But GE counts its program—which

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In thin gauges, film made of GREX is an economical, highly effective food package. Heat-sealed as an "envelope" it has excellent moisture and gas barrier properties . . . clear, attractive and rip-resistant.

In heavier gauges, GREX film is a sturdy, re-usable cover for construction projects . . . for example, as a moisture barrier for slow curing wet concrete. It has many valuable uses in agriculture as well—*wherever moisture control is critical.*

For packaging . . . in construction and agriculture . . . for industrial coatings . . . *this versatile plastic means better products for you.*

\*Trademark for W. R. Grace & Co.'s polyethylene

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rings in manufacturing, engineering, finance, and all the other segments of the business—as much more than just an old-fashioned sales promotion campaign.

As Cordiner told stockholders: "I am proposing a total effort by every man and woman who has a job. . . ." He added: "A powerful, customer-focused effort now can make a listless market come alive, and start volume of production moving upward again."

"Ours is a sales support program," says GE's Smith. "We want salesmen to be able to go after new customers, not have to spend too much time straightening out old customers because shipments are delayed or quality isn't up to par."

• **Unlimited**—Operation Upturn isn't confined to consumer goods. The company thinks it is applicable to defense work, where quality is vital in order to meet contract obligations.

On the industrial goods side, GE recognizes that for the time being the emphasis can't be on bricks and mortar expansion. But its Apparatus Sales Div., which accounts for a large volume of business, plans to be one of the most active in the drive. It will stress modernization and the installation of "productivity increasing" equipment.

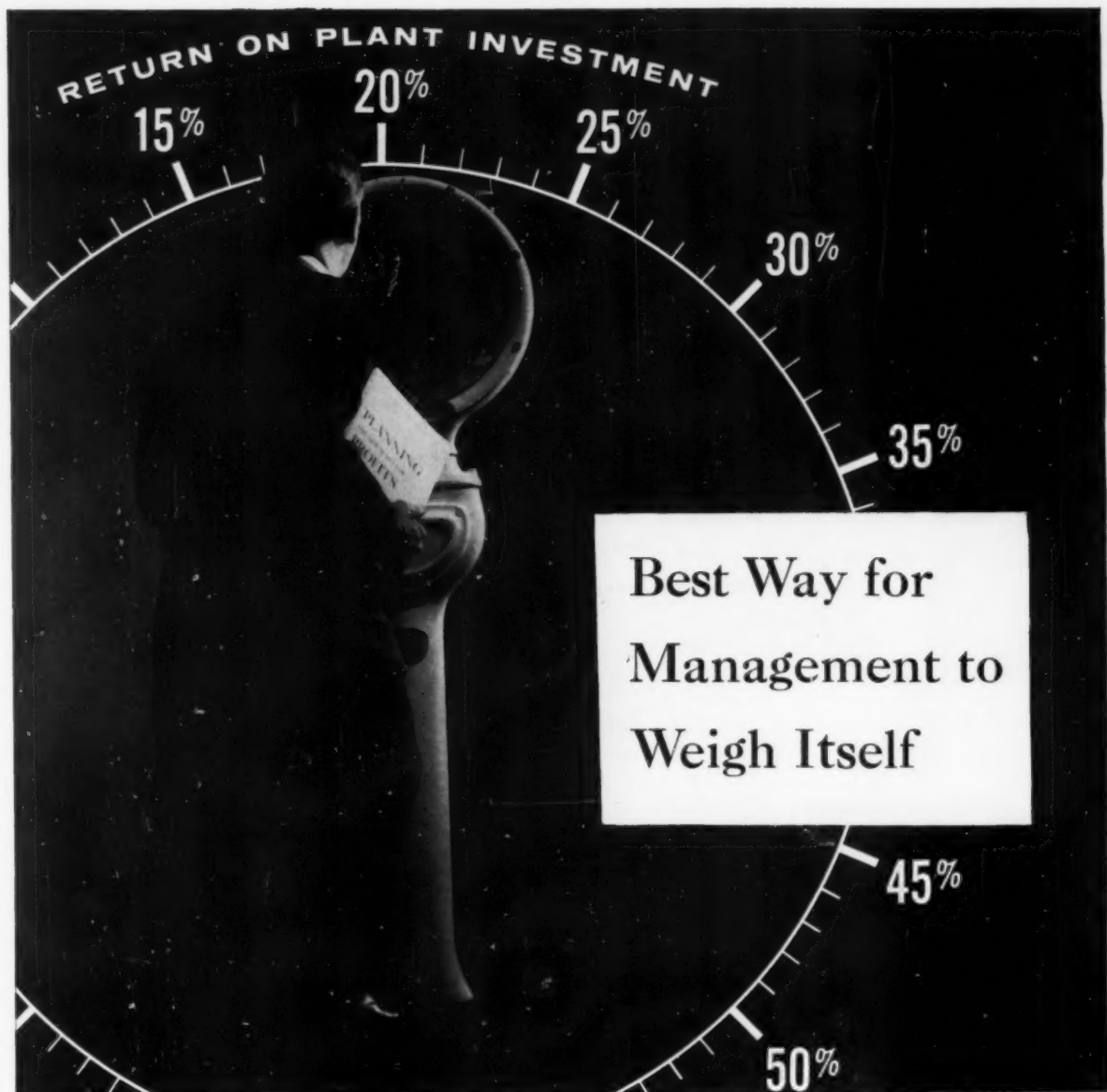
Heavy apparatus is linked to the growth of utilities—and the company thinks it can sell the utilities on the need for ordering now, since the electrical generating industry will be hard-pressed for capacity by the early 1960s if present population trends hold good.

• **Promotional Handle**—At the department level, spokesmen say the Operation Upturn is giving them a promotional handle for their dealer and distributor programs.

"Instead of listening to grumbling about margins," said one, "we can excite dealers into selling the real values in our products. It gives us a story we can carry right through the dealer to the consumer."

• **Dedication**—Philip D. Reed, who retired this year as board chairman but continues as chairman of the finance committee, will be the personality around which Operation Upturn revolves. The whole program is dedicated to him for his years of service to the electrical industry. He will be presented with a report of company results from the drive when final returns from division general managers are made early in December. **END**





## Best Way for Management to Weigh Itself

**T**HE RATE OF RETURN on invested capital and on earnings reinvested in new plants is the true measure of the quality of your management. Making and directing capital investments is one of the few major independent actions still open to management.

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Your money for a new plant is spent on three activities . . . engineering . . . procure-

ment . . . construction. Unlike most contracting organizations, M. W. Kellogg provides all three of these services in depth under one central management . . . thereby permitting maximum coordination of these activities and resultant lower investment costs. These lower costs achieved today largely determine the rate of return on your investment tomorrow.

If you participate in planning or executing capital expenditures, you will profit by reading Kellogg's new book, "Planning the New Plant for Profits." For your copy, please write on your company stationery to J. M. McAneny, Director of Industrial Projects . . .

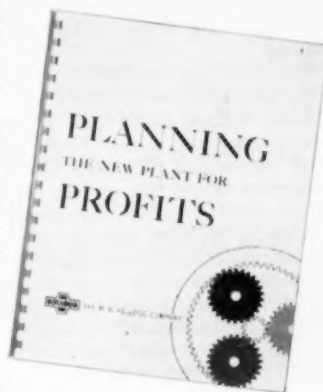
### **The M.W. KELLOGG Company**

711 Third Avenue, New York 17, N. Y.

*A Subsidiary of Pullman Incorporated*

Offices of Kellogg subsidiary companies are in Toronto, London, Paris, Rio de Janeiro, Caracas

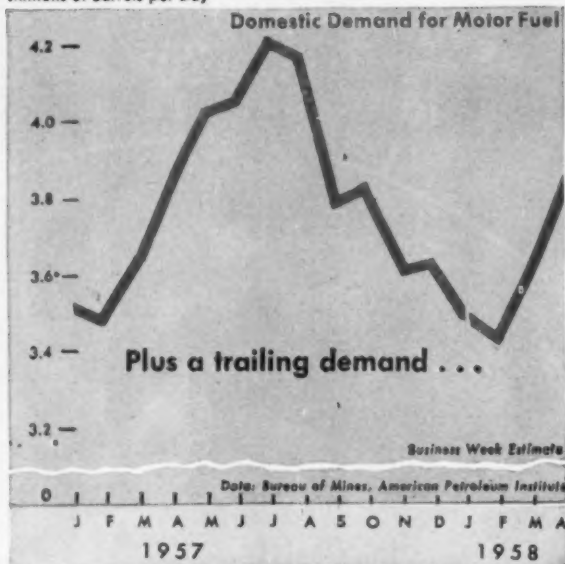
**JUST PUBLISHED—  
IMPORTANT READING  
FOR MANAGEMENT**



Millions of Barrels, End of Month

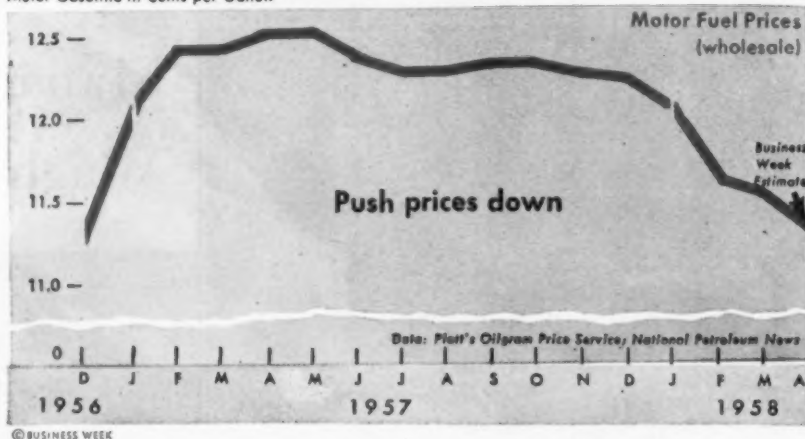


Millions of Barrels per Day



Oil companies have too much gasoline stocked up, and they're trying to move it.

Motor Gasoline in Cents per Gallon



## Selling Is Hot—Buying Isn't

"The hottest market since 1932." Thus B. L. Ray, vice-president in charge of marketing for Esso Standard Oil Co., sums up the picture today. His forecast of an all-out scramble for sales and profits applies to all petroleum products, but it shows up especially in gasoline.

The charts tell part of the story: gasoline stocks at record levels; demand showing fatigue after years of steady growth; dropping prices. The result: a sharp downturn in profits for most companies in the first quarter of 1958 and, at retail, price wars that play havoc with profits at every level.

• **Offer More and More**—Signs of the competitive times appear every day in the advertising columns: Shell with plenty of steam behind its Super Shell with TCP, Gulf with its "New Gulf Crest," Tidewater with its ads chal-

lenging the industry to an octane race.

This week another challenger made news. Esso announced its "new formula" Esso Extra, replacing its former premium gasoline. Radiation research, the company said, has resulted in new production techniques that mean a better, and better balanced, fuel at lower prices than competing top premium grades. Most "improved" premiums get 4¢ a gal. more than regulars at the gasoline pump. New-formula Esso went on sale this week at a 3¢ differential. The company's Golden Esso Extra is 6¢ higher than regular.

The company is backing its new fuel with "the biggest and most expensive promotion campaign in our history."

Esso isn't the only company to pin hopes on a new product. Sunray Mid-Continent Oil Co. of Tulsa credits its D-X Boron, introduced last summer

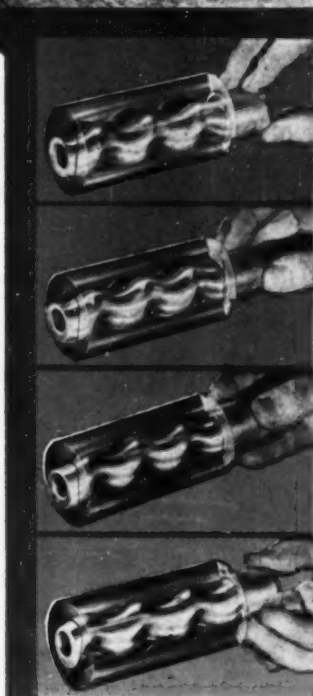
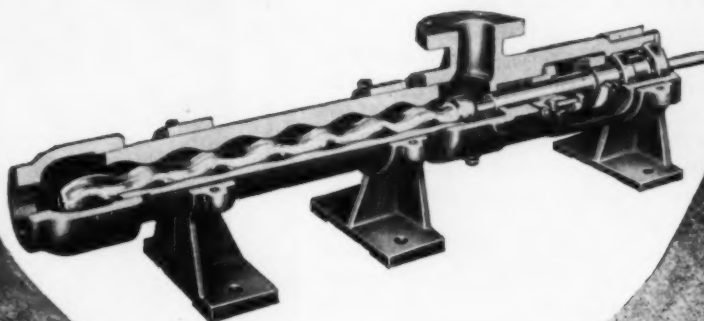
(under license from Sohio), with boosting its sales of premium gasoline 17.8% in the first quarter of 1958.

### 1. What's the Hurry?

The overwhelming marketing fact is too much of everything: product, capacity, retail facilities—everything but customers. World War II and Korea encouraged companies to expand (and the government urged them to). Many new operators came in. Vast new crude sources outside the U.S., which produce much more cheaply, aggravated the U.S. supply situation.

The Suez crisis brought new incentive to expand. The crisis ended abruptly. The stepped-up activity to meet the crisis didn't. Crude and refinery cut-backs in recent months and reductions in imports have helped. But the supply-

**IF IT CAN  
BE PUSHED THROUGH  
A PIPE... A **MOYNO**®  
WILL PUMP IT!**



Moyno's exclusive "progressing cavity" principle permits hundreds of formerly "unpumpable" materials to be handled successfully. The screw-like rotor revolves in a double threaded stator forming "progressing cavities" that move the material smoothly without foaming, aerating, crushing or excessive pump wear.

Typical materials pumped include non-pourable pastes, slurries, chemicals, foods, acids, even suspended solids up to one inch in size. Capacities available up to 500 gpm and pressures up to 1000 psi.

No doubt a Moyno Pump can cut costs drastically for you. Write for Bulletin 30-BZ.



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SPRINGFIELD, OHIO      BRANTFORD, ONTARIO



MOTORS



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MOYNO PUMPS



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## **CRUCIBLE STEEL COMPANY OF AMERICA**

*the company . . . . . its products*

**4 of thousands**

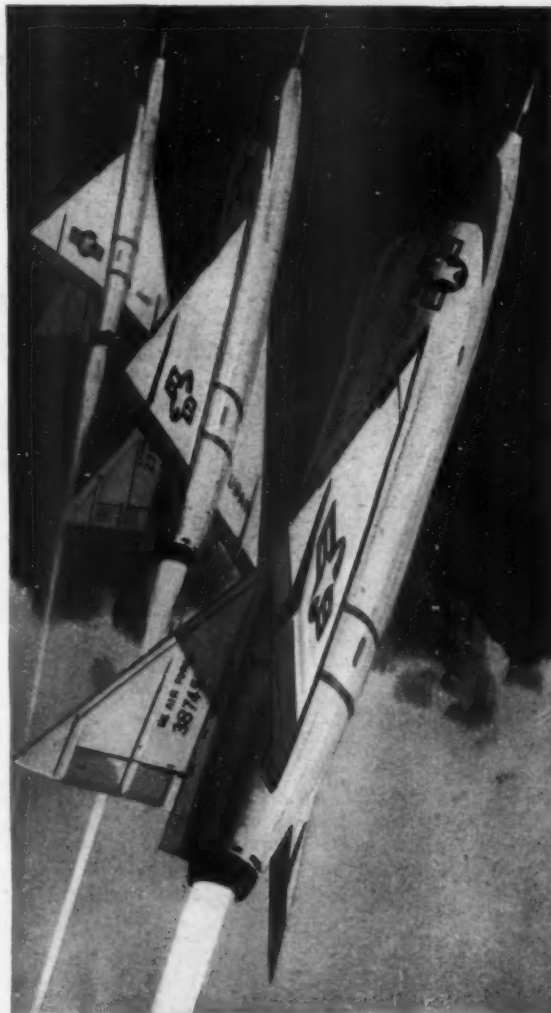
### **Full integration— what it means to the steel buyer**

Crucible is a fully integrated specialty steel producer. This means Crucible has complete control over and sole responsibility for what it sells — right from the iron ore itself to the final delivery of finished mill products. Complete integration like this means continuous, dependable deliveries, and the highest degree of uniform product quality.

Crucible's integration is complete, right to the point of use, too. For Crucible owns and operates the largest, nationwide chain of specialty steel warehouses. They are conveniently located in 27 major industrial centers from coast to coast, and more are being added regularly. Each Crucible warehouse carries large stocks of a full range of special purpose steels (see listing below).

Furthermore, Crucible's fully integrated operation encompasses an extensive research program for the development of new and improved alloys to meet the ever increasing demands of industry. And Crucible metallurgical research daily aids industry in the selection and application of special steels for special purposes to improve product performance and reduce costs of manufacture.

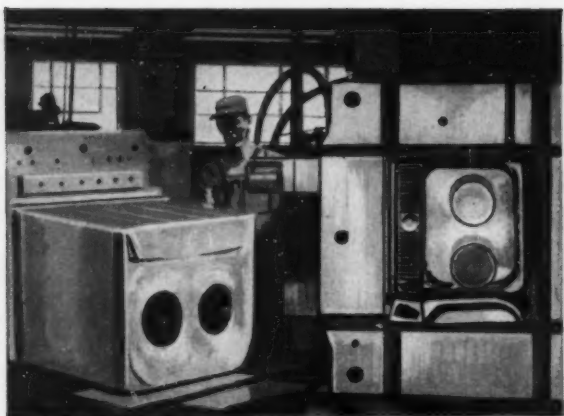
As a company, Crucible is organized to serve its customers. And its thousands of products—the most diversified line of special steels and alloys available anywhere—are unexcelled in quality. For the address of the Crucible branch office or warehouse nearest you, or for technical data on Crucible products, write to *Crucible Steel Company of America, Dept. ME05, The Oliver Building, Mellon Square, Pittsburgh 22, Pa.*



**TITANIUM SHEET** — Titanium sheet has improved the performance of many advanced aircraft. Crucible is one of the major suppliers of titanium mill products to the aviation industry. In cooperation with other industries, Crucible is actively developing new commercial markets for this very light, but strong and corrosion-resistant, metal.

**FROM CREATIVE CRUCIBLE** — the one full range of special steels: high speed; tool steel; plastic mold; stainless; free-machining, high-strength, wear-resistant and standard AISI alloys; hollow drill; agricultural discs and shapes; heavy-duty coil springs; specialty alloys; permanent magnets; precision castings; cold rolled alloy and carbon spring steels; titanium and titanium alloys; stainless and high alloy welded tubing; vacuum-melted metals.





**PLASTIC MOLD STEEL** - For molding large television cabinets, it must be clean and uniform in composition and structure. That's why Crucible CSM 2 tool steel is first choice among most mold builders. Every piece is ultrasonically inspected at the mill. And it's immediately available from Crucible warehouse stock in 205 sizes.



**PERMANENT MAGNETS** - Although widely used in electronic applications, Crucible Alnico permanent magnets are now finding their way into many different types of products from refrigerator door latches and other attractive devices to magnetos, motors, generators and numerous instruments. Crucible Alnico magnets are sand cast, shell molded, or investment cast in any shape, tolerance and finish needed - in any size from a fraction of an ounce to several hundred pounds.

**STAINLESS STEEL STRIP** - Crucible stainless steel strip is the quality standard in automotive, appliance and numerous other trim and molding applications where long-lasting life and high lustre count most. It is easy to clean and highly resistant to corrosion and wear. Crucible stainless strip is precision rolled and processed to your own specifications.



"We move our top personnel  
the **Burnham** way!"

**Burnham's** tariff saves my company money.

**Burnham's** one packing rate schedule assures our company of uniform charges

**Burnham's** scientific, controlled packing keeps costs to a minimum

**Burnham's** complete service makes for good employee relations

One call telling Burnham's when, where and who is all I need to do

## Burnham's Van Service

Home Office  
COLUMBUS, GEORGIA



Service to 48 States



Consult  
the Yellow  
Pages



demand picture is still far out of whack.

• **Bad Comparison**—Major companies point out that first-quarter profits look bad from the fact that the industry was at the height of its Suez effort a year ago. But even without that comparison, marketers would be worried. Standard Oil Co. (N.J.) has one word to sum up the reason for the profits drop. It's "competition."

The oil industry has heard about competition before, but today there's a vital factor that hardly counted 10 years ago: the growth of the private brand operator. This may be a jobber who sells to or owns a string of retail stations; it may have its own refinery; it may be a refinery with or without a marketing operation.

Ten years ago, the independent retailer was likely to be a shabby character, selling inferior product, often for 5¢ or more below the major brands. Today his product is often as good as the product sold under a major label. It may, in fact, be the same gasoline.

• **Big Independents**—Many independents are big businesses with their own refineries. According to one estimate, the independents accounted for 10% of total national gallonage in gasoline 10 years ago; today, nearly 25%. In every market they are growing. The price gap has steadily narrowed; today, a 2¢ differential is common.

In a competitive market, the independent has some advantages. Often he can buy at the terminals, shop for the best price. And he sells cheaply. His weapon is price; his strength, volume.

Dealers charge—and majors will admit—that majors tend to dump excess capacity on private operators. (At least, majors admit the other fellow does it.) Come a shortage, the independent might have supply trouble. But he doesn't today.

• **Peculiar Problems**—New competition and overproduction are problems that plague many other industries, too. The oil business also has some peculiar problems of its own.

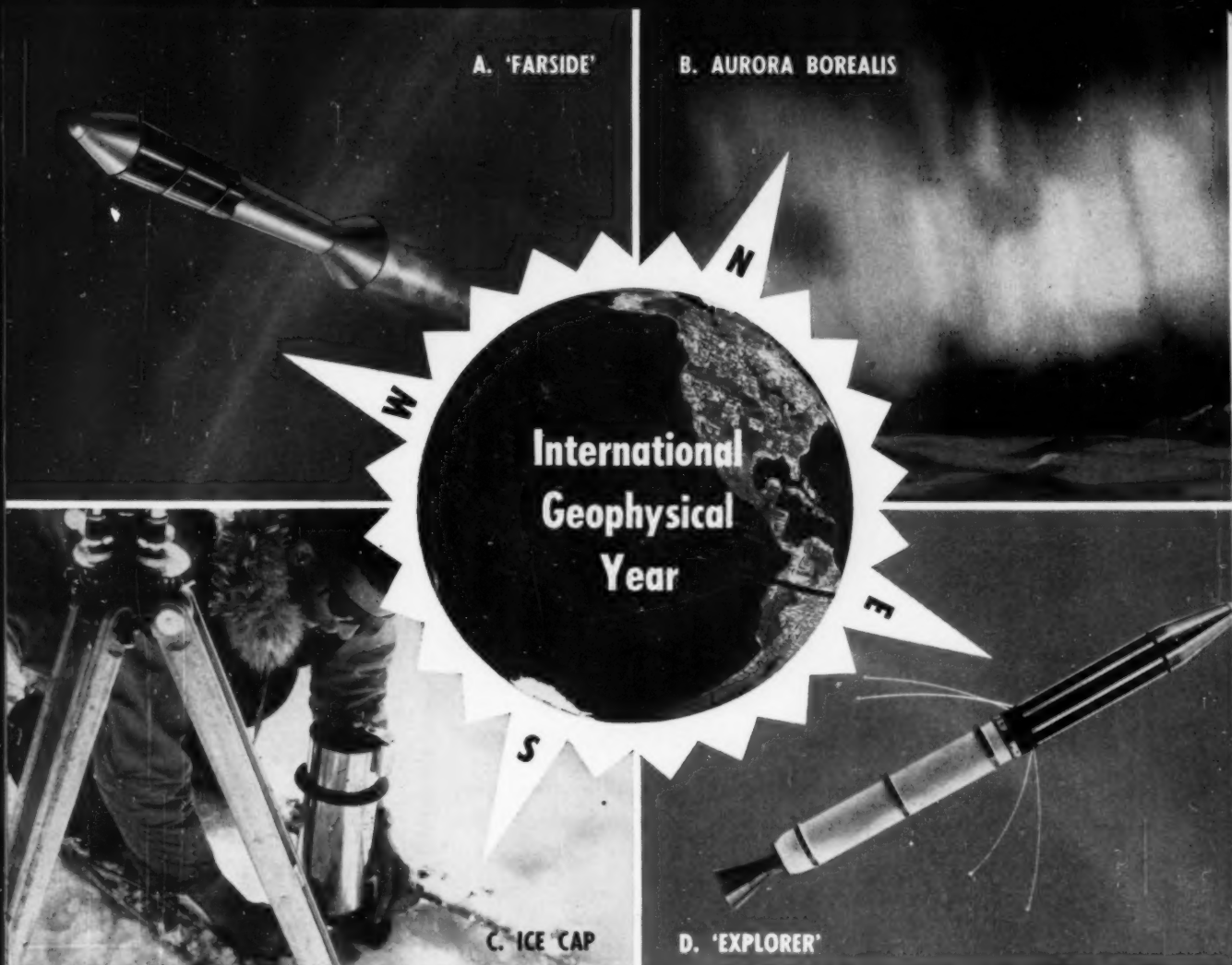
One is the relative inflexibility of crude prices and the great flexibility of refined products prices.

Crude producers attempt to price on the basis of costs, and costs—for equipment, exploration, labor—are up. Technically, refiners initiate price changes by posting the price they will pay for crude (often to themselves as producers of the crude). But the conservation orders in such producing areas as Texas can keep crude output pretty well in line with demand, hence keep crude prices firm.

• **What Market Will Bear**—The marketers have no such stabilizer. They, too, try to price their products to bring a profit. But if the demand isn't there, the target price won't materialize. Many things—a drop-off in car sales,

A. 'FAR SIDE'

B. AURORA BOREALIS



## exploring for a better world

**AT THE FOUR CORNERS OF THE EARTH**, more than 5000 scientists from 67 countries are joined in an all-out assault on the vast gaps in our knowledge of the universe. In, on and above the earth, studies are underway to learn more about how we can make better use of the planet we call home.

**A. ENIWETOK, South Pacific** — Four dozen tiny Texas Instruments components (diodes and transistors) rode more than 4000 miles out into space in Operation Farside, current holder of rocket altitude record.

**B. NORTH POLE, Arctic** — *recti/riters*, TI ink-writing rectilinear recorders, trace the flicker of the aurora borealis and measure the all-but-invisible polar airglow.

**C. SOUTH POLE, Antarctic** — Texas Instruments seismic exploration systems plumb the depths of the polar ice cap... TI's famed *Worden* gravity meters weigh the earth beneath... *recti/riters* warn scientific adventurers against deadly ice crevasses.

**D. CAPE CANAVERAL, Florida** — TI transistors and diodes in the Jupiter-C missile helped put the Explorer on its journey... and the United States' first satellite uses Texas Instruments transistors.

Texas Instruments role in these great scientific events results naturally from TI's more than a quarter-century experience in geophysical exploration... and in the design, development and manufacture of geophysical instrumentation, electromechanical systems and electronic components for rugged commercial and military applications.

**TEXAS INSTRUMENTS**  
INCORPORATED

keep an eye on TI



6000 LEMMON AVENUE  
DALLAS 9,  
TEXAS



## No maintenance problem here!

Four Taylor laminated plastic springs have been flexed more than one billion times under heavy loads and corrosive conditions without failure

Once the laminated steel springs supporting the oscillating tank on a rotary screen of a papermaking machine created a severe maintenance and production problem for a user of this equipment. Lubricants would not hold, rust developed, metal fatigued, and the equipment broke down. After many attempts to solve the problem by usual methods, Taylor laminated plastic springs were installed. Since then 15 years have passed, and there have been no spring failures even though the loaded tank weighs 13,000 lb. and oscillates at 300 cycles per minute, 24 hours a day, 6 days a week. The corrosive conditions around the machine have had no ill effect.

You, too, may have problems where the strength of Taylor laminated plastics, plus their moisture-resistant and wear-resistant qualities, can reduce maintenance time and replacement costs. Our application engineers will be glad to discuss them with you and also the convenience of our integrated plants at Norristown, Pa., and La Verne, Calif.—and make recommendations. Get the benefit of their counsel by contacting TAYLOR FIBRE Co., Norristown 35, Pa.

# Taylor

LAMINATED PLASTICS VULCANIZED FIBRE

less driving, bad weather—can upset any prediction of gasoline demand (BW—Jul. 20 '57, p45).

At least some companies believe that, if the market is to stabilize, the marketers must have stronger control over production. But this isn't easy. Consumers won't tolerate an empty gasoline pump. Once the flow of production starts, it's hard to stem it. Crude producers need to sell to get money to keep exploration work going. It is better economics for refiners to operate as near capacity as they can. But there's a limit to their storage capacity. They must sell—and the market sets the price.

• **Price Wars**—The most obvious symptom of what one company calls "the present mess" is the price war.

This can start in a number of ways. It may be a dealer—major or private brand—who is losing sales and is out for volume gallonage. It may be a newcomer in a market—either an independent or a major—who sells on price to get a toehold.

Practically any major will say, "We don't start a price war." But most of them will protect their dealers in a price war area by discounts to meet the competition. Usually they attempt to allow their dealers to get at least a 4¢ or 4.5¢ margin—against a normal margin of 5¢ to 6¢.

• **Subduing a War**—Some companies feel that, by protecting dealers, suppliers prolong price wars. Some companies, such as Standard Oil of California's Western Operations Div., have a formula that they think slows wars. If a war shaves a dealer's margin, the company absorbs part of the decline while the dealer stands the rest. Since some of the lost margin comes out of the dealer's pocket, the company thinks its dealers think twice before joining in the fray.

Some in former periods have tried to act in a "statesmanlike manner" by not lowering prices to an uneconomic level. But statesmanship doesn't always pay. Now most majors meet cut with cut.

## II. What Answers?

Everyone would like to find that higher prices are the solution. Gulf Oil Corp. took this tack late in February—and made the price hike stick. It did this by dint of a promotion campaign aimed at both the dealer and the consumer. Gulf credits this program with the fact that its first-quarter earnings dropped only 36% while some companies reported a 75% drop. But this is a hard solution when inventories are high and demand isn't.

Some companies feel they should assume more of the "retail responsibility" or have greater control over retail prices. To others, this is anathema, and



IN MONTEREY



IN MANHATTAN



## THEY WATCH THE SAME SHOW *thanks to Bell System network channels*

All three of them are ten years old this month—two boys a continent apart and the television network that ties them together.

For speed of growth and impact on our daily lives, no other industry has ever equaled network TV.

In May, 1948, the Bell System set up the first commercial TV network service between Boston, New York, Philadelphia, Baltimore and Washington. Today, almost 80,000 miles of Bell System television network routes are bringing the same programs to millions all over North America.

Television has knit us together as a nation of people—people who laugh at the same jokes, thrill to the same sports, and share in the drama of important national events.

Network TV is a part of the American way of life. And the Bell System makes it possible.

*Communications studies are the basis of our service to the television networks and to other businesses of all types and sizes. A study of your communications needs would show you how to serve your customers better. If you'd like to discuss this, just call your nearest Bell Telephone business office.*

**BELL TELEPHONE SYSTEM**





**INGALLS**  
means many things  
to many industries

## INGALLS

**Builder of Specialized Barges and Towboats**

To many chemical companies, the name Ingalls means specialized barges for transporting liquid products safely and economically. Ingalls-built barges now transport such cargo as molten sulphur, crude oil and anhydrous ammonia.

In other industries, the name Ingalls means platework, precise structural steel fabrication and erection, or tanks, pressure vessels and bins. To others, Ingalls means naval, passenger and cargo ships or work boats.

If your planning will involve fabricated steel, find out more about Ingalls. It means many things—including economy—to many industries.

*Call or write for brochures*

## THE INGALLS INDUSTRIES

Fabricators and erectors of structural steel, platework and tanks, and builders of liner ships and boats.

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The Ingalls Iron Works Company, Sales Offices: New York, Pittsburgh, Chicago, Houston, New Orleans, Atlanta.

The Ingalls Steel Construction Company, Sales Offices: New York, Chicago, New Orleans, Pittsburgh, Houston, Atlanta.

Birmingham Tank Company, Sales Offices: New York, Pittsburgh, Chicago, Atlanta, New Orleans, Pascagoula.

The Ingalls Shipbuilding Corporation, Shipyards: Pascagoula, Mississippi; Decatur, Alabama  
Sales Offices: New York, Chicago, Washington, Houston, New Orleans, Atlanta.

a solution that might well send dealers and jobbers running to the government.

• **More Outlets?**—Dealers accuse many companies of seeking an answer that leaves the established dealer distinctly cold: to expand new outlets. Majors reply that, in the long run, there has been either a net decrease in the number of retail outlets or only a very slight increase.

What the majors are stressing heavily is better outlets—bigger, more efficient, and in better locations. This may mean more sales per station. Most, too, are getting more selective in picking new dealers, and are coming down hard on dealer education in merchandising and housekeeping.

• **Cost-Cutting**—All companies are in the throes of cost-cutting programs. Esso has consolidated some of its bulk plants; Gulf is trying to eliminate or consolidate some. Larger tankwagons, more storage space at retail stations aim to cut down costly deliveries. Continental Oil Co. puts big stress on a less costly service station design.

• **Company Stations**—Most majors deny any significant change, but some feel there is growing stress on commission stations where the operator sells products as a commission agent for the supplier. This gives the supplier a chance to control price. Companies point out that they may start out a new station on this basis, then let the agent take over.

In the past decade, jobbers have come more prominently into the picture for some big concerns. Thus, one company says that in the past nine years it has made a 30% cut in the number of stations with which it deals directly. At the same time its total outlets have risen slightly. Phillips Petroleum is one company that uses mainly small, independent jobbers.

• **Small Gain**—Despite the conflict and confusion, most companies expect a better showing in 1958 than last year, though no one mentions a gain higher than 2.5%. Inventories are getting more in line; prices should firm up a bit, and many talk hopefully of a pickup at least by fall.

This optimism applies to big independents, too. "Independents are doing as well as the major operators," says Pres. K. C. Baker of J. D. Strett & Co., big St. Louis operator. "Only we don't cry about our woes so much."

The industry is divided as to whether the price gap between independents and majors will continue to narrow. The independents want to hang on to their price advantage. Sun Oil Co.'s marketing vice-president, Willard W. Wright, among others, feels that the day of the accepted price spread is over. Others feel that service is their best-selling commodity, think they can continue to get higher prices for that service. **END**



## A NEW MATERIAL TO BRIGHTEN UP YOUR PRODUCT

*Color helps sell these new Sunbeam electric fry pans and other Sunbeam Corporation appliances.*

Where do you want to put the selling power of *color* to work in your product?

Now you can get rigid, strong parts like these in a whole spectrum of opaque, light-fast colors.

How?

With a new, amazingly durable plastic molding material—Durez polyester.

These parts combine rugged strength with other qualities you'll find in no other color plastic. Their electrical properties are outstanding. They're inherently fire-resistant—meet Underwriters' requirements for appliances.

You can use Durez polyester in

many places where you can't use other plastics, because *parts show virtually no change in dimensions after molding!*

Your molder can get this new plastic now in a variety of standard colors. It comes in a dry granular form and is easily molded on standard presses with compression or transfer molds.

If you'd like to brighten up your product with strong, dimensionally stable parts like these, ask us for illustrated Bulletin 200. Write DUREZ PLASTICS DIVISION, Hooker Electrochemical Company, 4005 Walck Road, North Tonawanda, New York.



**Solves shrinkage problem!** These parts for Singer Sewing Machine Co., molded from Durez polyesters, retain their shape better than any other color plastic. Parts fit together better for faster assembly, fewer rejects. Can this new plastic brighten your product?

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This unique leather polishing machine speeds its heavily loaded roller back and forth over every inch of a leather side. Like all the other machines in these Endicott Johnson plants, its complex parts are protected by Mobil Correct Lubrication.



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# \$19,080...with the help of Socony Mobil

**Leading shoe manufacturer cuts downtime and maintenance...  
increases production...all through Mobil's lubrication program!**

Endicott Johnson's records offer impressive proof of how a Mobil Program of Correct Lubrication can cut maintenance costs and improve production. Total savings in 1957 alone amounted to \$19,080.

The major share of these savings was made in Endicott Johnson's Upper Leather Processing Plant. Mobil engineers, in close cooperation with plant personnel, analyzed lubricant application methods... set up schedules and lubrication

records for every machine. As a result, application time was cut 33%... a saving of \$12,466.

Every phase of Mobil Correct Lubrication is designed to cut maintenance costs. For example, Mobil's in-plant training courses can instruct your personnel in the most up-to-date lubrication methods. Mobil laboratory service can supply invaluable information on oil condition. These services, and many more, are yours when you rely on Mobil. Why accept less for your plant?



*Special grease saves \$1,075. Six blower breakdowns a year were occurring in ovens used to dry leather. 300°F. temperatures caused bearings to fail. Mobil recommended high temperature grease. Failures ceased, grease consumption was cut 50%.*



*Mobil specialist avoids costly gear replacement. Mobil gear specialist made a study of all gears in Endicott Johnson's Paracord plant. His recommendation to reverse certain gears to compensate for wear avoided replacement... saved a substantial sum.*



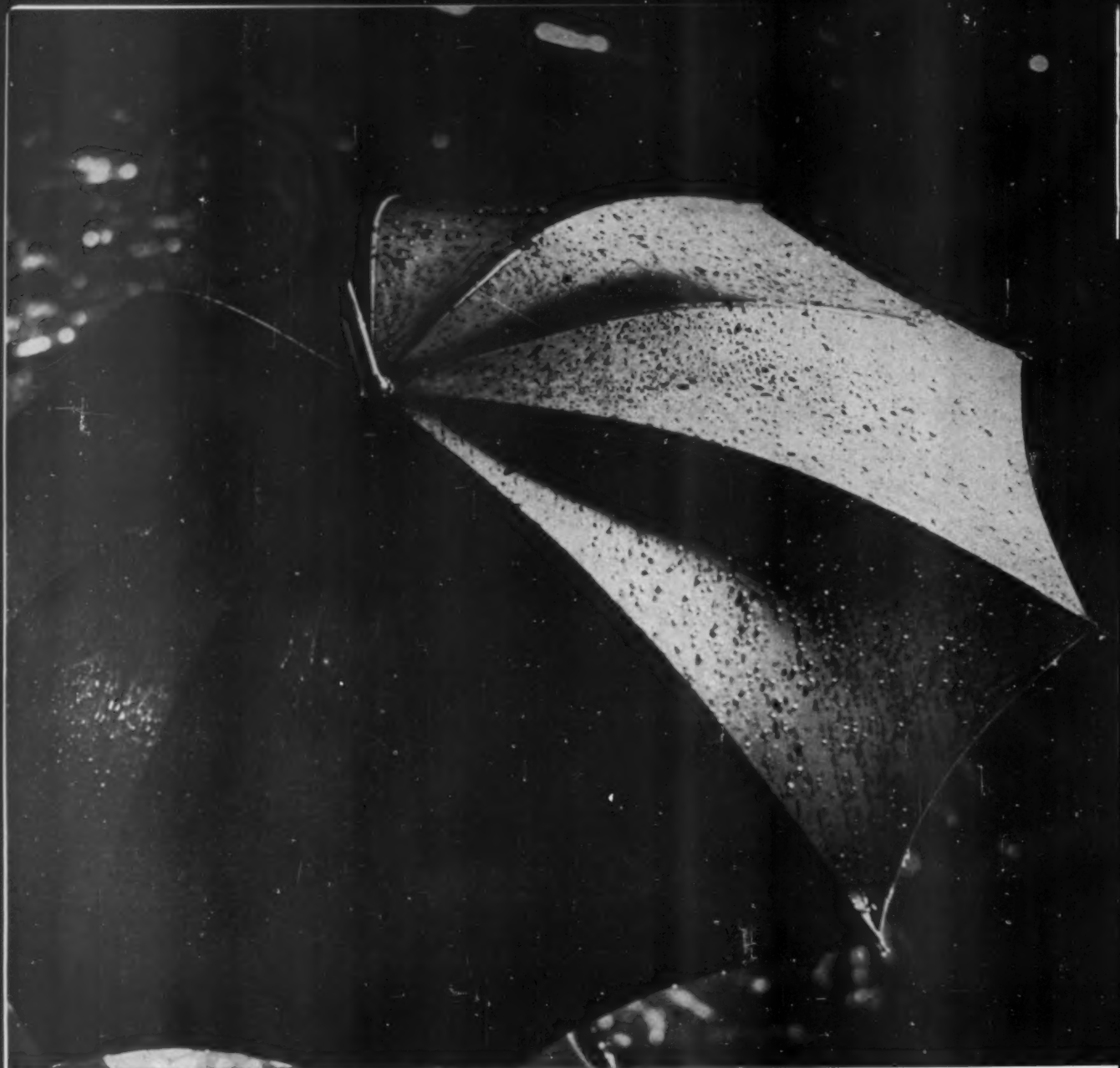
*Mobil sizing ingredient saves \$5,039. Mobil representative suggested new ingredient for production of fiber board used in shoe counters. New product permitted use of less rosin in sizing process.*



*Stuffing wheel failures eliminated... \$500 saved. Severe operating conditions made it necessary to overhaul one of these huge wheels a year. Mobil recommendation made overhaul unnecessary.*

## Correct Lubrication

***Another reason You're Miles Ahead with Mobil!***



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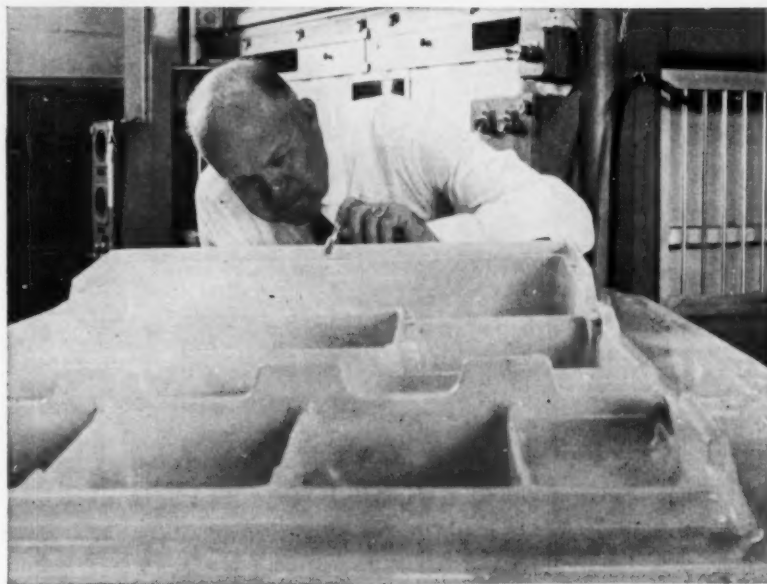


The principal GPE companies cover needs of defense and industry in these areas: Audio-Visual, Automatic Controls and Automation, Aviation, Chemical Processing, Electronic and Electrical, Graphic Arts, Instrumentation, Marine, Motion Picture, Packaging, Paper, Petroleum, Photo Technology, Power Generation and Conversion, Printing, Steel, Television, Textile.

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<i>LIBRASCOPE</i>	<b>GPE</b>
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Address inquiries to:  
General Precision Equipment Corporation  
92 GOLD STREET, NEW YORK 38, N. Y.

## NEW PRODUCTS



BUBBLE-MOLDED refrigerator door liner of Fortiflex polyethylene has very little variation in wall thickness despite its many ridges. The new molding technique means . . .

## Plastics Get an Even Stretch

Blowing big bubbles in sheet plastic before it is molded is the latest improvement in the widely used technique of vacuum forming complicated parts. Conventional vacuum forming machines shape parts by heating a sheet of plastic and sucking it down over a single mold, where it cools and becomes rigid. But where the part has deep depressions or sharp ridges, the soft plastic often stretches out too thin.

In bubble molding, the plastic is stretched evenly before it hits the mold, minimizing variations in wall thickness in the finished part. That

means stronger parts, and may let molders start out with thinner sheet.

• **How It Operates**—In operation, the molding machine—called an air-slip molder—heats a sheet of plastic held over a movable mold. When the sheet is soft, the mold moves up an airtight cavity, acting as a piston and ballooning out the plastic. When the mold is up inside the bubble, the air is drawn off rapidly and the bubble collapses around the mold. Big parts, such as refrigerator liners, show less than one-third as much variation in thickness as similar parts molded on conventional

HOT PLASTIC bubble rises over the mold . . . then collapses around it to form the part.



A close-up photograph of a circular optical component, likely a lens or a camera's viewfinder. It features a central dark circle surrounded by concentric rings of varying shades of gray and white. The image is somewhat grainy and has a high-contrast, black-and-white aesthetic.





## The homer that never came down

We've played some pretty important ballgames at the old Beaver Hutch, but this was the biggest. Night affair with the Blues and the Pennant on the line. Well, my Beavers was two runs behind in the ninth with two outs; we had two men on base, and my best fella—Boll Weevil Barnes—was up at the plate.

He misses two slow curves and then the Blues pitcher slips him the fast ball. The Weevil wades into it . . .

And the lights conk out. Power cable failure.

Now, I been afraid of that since five years back, when President

Piedmont overruled the engineers who'd laid out the lighting system.

"Look," I'd told him, "I'm only the manager, but if the perfessors say you should get Okonite-type cable—"

"Okonite-Shmokonite," snaps Piedmont. "Our supplier tells me Zilch cable is plenty good enough. You worry about your hitters and I'll worry about the cable."

Well, he started worryin' when the Weevil banged that pitch. It took off into the dark and far as I know it's still up there. Five seconds later, three Blues outfielders were chargin' the Ump, waving

balls they claimed they'd just caught. Then *our* boys arrived, luggin' a damaged relief pitcher and hollarin' that his noggin had just been dented by the Weevil's drive after clearing the left field fence. Both teams squared off, the fans joined in, and it finally took the riot squad to clear the joint.

We hadda replay that last inning next day and got clobbered. So Piedmont's just-as-good cable cost us a Pennant, Series money, and the price of installing new cable.

What brand? Well, the stands underneath the lights are now called Okonite Alley.



where there's electrical power... there's **OKONITE CABLE**



*Packers increase output with automated slicing, shingling, carding, and weighing on compact bacon line offered by Emhart's Standard-Knapp Division.*

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Emhart machines handle and process all kinds of packages. Emhart services start with material selection and package engineering, go through to the shipping platform. Standard machinery adapted to existing lines—or totally new systems—pay for themselves. Faster selling packages come faster—and at less cost—when Emhart equipment is on the line.

Other examples of Emhart equipment, shown below, indicate the diversity of problems Emhart solves. For background on our scope, please write for the brochure, "EMHART—its people and products."



## EMHART

EMHART MANUFACTURING COMPANY, HARTFORD 2, CONN.  
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EMHART SWEDEN AB, STOCKHOLM  
AB SUNDSVALLS VERKSTADER, SWEDEN  
EMHART INTERNATIONAL, S.A., PANAMA



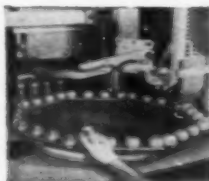
Emhart noise suppressors add a quieting plus to efficiency.  
MAXIM SILENCER COMPANY



Emhart machines are standard of glass container industry.  
HARTFORD-EMPIRE DIVISION



Emhart Skyworkers raise men to new levels of efficiency.  
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Emhart press feeders greatly reduce accidents and costs.  
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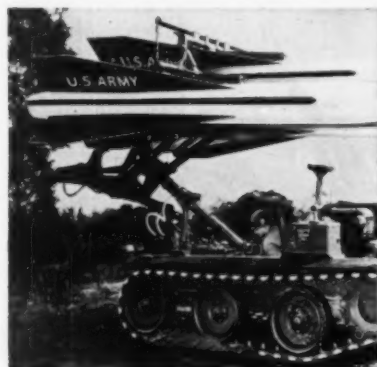


Emhart distillation units convert sea water to fresh water.  
MAXIM SILENCER COMPANY

# Missiles Spawn a Busy Sideline



REDSTONE missile gets a lift from an A-frame, H-frame rig by Hayes Aircraft.



HAWK rides on tractor-driven missile loader, by Food Machinery & Chemical.



MISSILE MASTER console by American Machine & Foundry. Cost: \$20,000.

For every dollar of the billions being spent on development and production of guided missiles that fly, just about as much money goes to make ground-based equipment to support the "birds"—newfangled apparatus to transport, handle, store, test, launch, and control the costly new weapons of the nuclear-space age (pictures).

To manufacture the special truck-trailers, test instruments, launching platforms, training simulators, shop cradles, lifting slings, cranes, fueling pumps, and all the other exotic new hardware peculiar to the missile, an auxiliary industry to missile production has developed.

• **Business Aplenty**—It has little of the glamor attached to the manufacture of rocket engines, missile airframes, and electronic missile guidance systems. But what it lacks in hoopla, the business of producing missile ground-support equipment makes up for in sales volume. In some cases—such as when a civilian product can be easily adapted to missile use—it might even be more profitable than making missiles themselves.

Both new orders and shipments of missile support gear now run at an annual rate of well over \$1-billion. And as the over-all missile program goes into higher gear, the volume of support business will burgeon still more.

• **Move to Standardize**—Meanwhile, however, the Pentagon is getting ready to shake the missile support program down as a means of curbing rising missile costs.

Up to now, the trend has been to design special support gear for each new missile project, with no great regard for interchangeability. The Defense Dept. is moving in with its first real attempt to save money by standardizing transport and handling vehicles used in missile projects.

Well more than 100 special-purpose vehicles have already been designed for different missiles—trailers, tractors, dollies, semi-trailers, fork-lifts, cranes, mobile erectors and launchers. Not all are in production yet. The office of the Assistant Defense Secretary for Research & Engineering thinks it can cut missile costs substantially and simplify logistics by limiting volume production as much as possible to vehicles with the broadest missile applications.

## I. Industry Who's Who

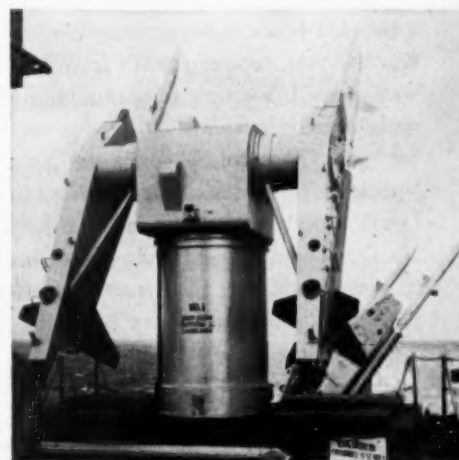
The missile support industry as a whole is pretty much of a hodge podge. It consists of thousands of producers. It contains, among others, companies



CORPORAL surface-to-surface weapon is hoisted by R. G. LeTourneau gear.



MATADOR Teracruzer and Translauncher, the latter by Goodyear Aircraft.



TERRIER, anti-aircraft missile, is launched from ship by Northern Ordnance rig.



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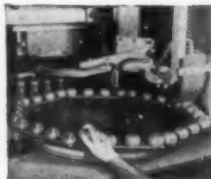
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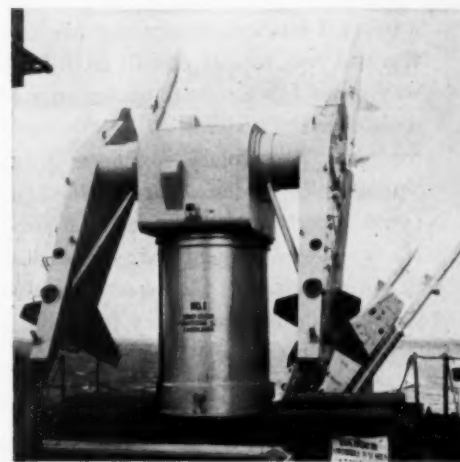
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General Aniline Works  
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Hercules Powder Co.  
Jones & Laughlin Steel Corp.  
Kennecott Copper Corp.  
Kroger Co.  
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**TIME AND MONEY SAVED by 2-way radio in the quoted survey includes the following uses:**

- fork lift trucks
- gas and electric tractors
- panel trucks
- yard locomotives
- highway trucks
- traveling cranes
- straddle trucks
- repair service vehicles



that have been able to fit their civilian products into the eccentric requirements of the missile program without major changes. Fruehauf Trailer Co., for instance, makes specially designed truck-trailers to haul the Nike, Redstone, Jupiter, Regulus, Thor, and Atlas missiles. Kaiser Aluminum & Chemical Corp. makes cable assemblies for the Nike.

• **Ahead on Standardizing**—American Machine & Foundry Co. has \$40-million-plus worth of missile support business (out of \$265-million total company sales). It rates as one of the busiest producers in the field—and as one company that anticipated the Pentagon's new concern over standardization.

AMF has developed two key products that it claims are applicable to several types of missiles:

• **The "Gravilift,"** a combination gravity-actuated missile launcher and telescoping shelter, which AMF says could launch almost any missile that's fired from a vertical position.

• **"Modular Automatic Test Equipment" (MATE)** for use as check-out equipment for all missiles. The system is an outgrowth of AMF's work in developing test instrumentation for the Titan intercontinental ballistic missile. By changing one or two of its standard electronic units, MATE is capable of testing different missiles.

• **Familiar Faces**—Old-line defense producers have gotten missile support contracts with brand-new products. Westinghouse Electric Corp., an established producer of military engines and electronic equipment, makes the launching and handling gear for the Navy's Polaris intermediate-range ballistic missile. Hayes Aircraft Corp., a veteran in aircraft modification and maintenance, makes the erecting equipment for the Redstone and Jupiter missiles.

Other long-time defense contractors have made the transition into missile support work abetted by their experiences in other lines of military production. Food Machinery & Chemical Corp., makers of armored vehicles since World War II, now makes a tracked mover for the Redstone and a transporter-erector for the Thor.

• **One for Another**—Even blue-chip companies with prime missile contracts of their own make support equipment for other projects.

Douglas Aircraft makes vacuum pumps for Chrysler's Jupiter IRBM. North American Aviation makes a special transport vehicle for Martin's Titan ICBM. Raytheon Mfg. Co., prime contractor for the Navy's Sparrow III air-to-air missile, makes the shipborne radar for Convair's Tartar surface-to-air missile. Northrop Aircraft, the prime on the Air Force Snark, makes the

launcher for the Army's battlefield missile, Raytheon's short-range Hawk.

• **Entree**—But most important of all, the missile support field has given many companies—both large and small—either their first important crack at defense dollars or a new source of military business to replace phased-out projects.

R. G. LeTourneau, Inc., an old hand in the dwindling defense market for construction machinery, makes the erector for the Army Corporal missile. Farrand Optical Co. makes the target survey system for the Army LaCrosse.

U. S. Steel makes the launcher for the Nike Hercules. Robertshaw-Fulton Controls Co. makes a hydraulic-pneumatic power supply trailer for the Atlas ICBM. General Sintering Corp. makes the fuse arming equipment for the Air Force's Falcon air-to-air missile.

## II. Big Slice of the Pie

Trace a typical missile project from the research stage through to volume production, and you'll find as much as 75% of the total cost tied up in ground support.

Even when design, development, and engineering costs are excluded, expenditures for missile ground-support equipment—as compared to gear for manned planes—are extremely high. According to a Pentagon estimate, 40% of every dollar spent for prototype manufacture and production of a missile for operational use is earmarked for ground support gear.

• **Gamut of Costs**—The ground support costs vary, of course, from missile to missile. A breakdown of total costs for the Bomarc, Hawk, and Nike Hercules surface-to-air missiles shows that 50% goes for the airborne missile and 50% for ground support.

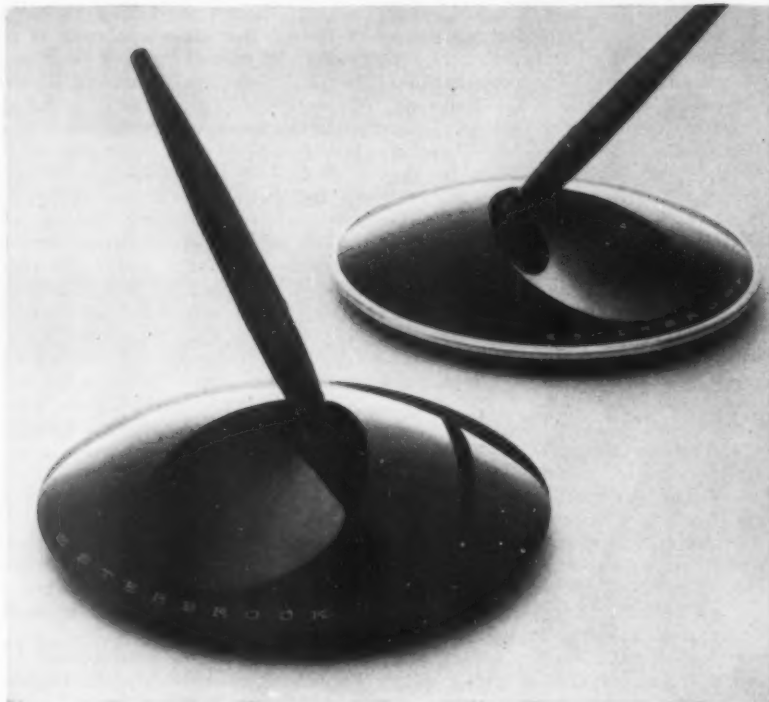
The average ratio for the Jupiter, Thor, Matador, Snark, Redstone, and Dart surface-to-surface missiles is 65% missile, 35% support gear. For the Falcon and Sidewinder air-to-air missiles, only 7% of the total cost is for ground support.

In the Army's Nike Ajax surface-to-air missile, the ground electronic equipment alone for one installation costs \$1-million—20 times the cost of one missile vehicle.

• **Pentagon Worry**—During fiscal 1959, starting July 1, the Air Force alone plans to buy \$943-million worth of missile ground support equipment—five times the amount bought only three years ago—and \$1.7-billion worth of missile vehicles.

To help it get a standardization program for missile vehicles under way and thus cut ground equipment costs, the Pentagon's Research & Development Office is organizing an industry advisory committee of eight or so executives from truck, trailer, and air-

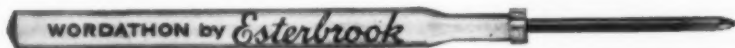




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craft companies. The group will be asked to survey the sizes, weights, and types of vehicles produced for missile projects, then come up with ideas on how to reduce the trend toward special-purpose vehicles.

But many skeptics hold that missile development is too rapid and revolutionary to be confined by effective standardization of support gear.

### III. How to Save Money

Still, there has been some success along these lines. The best example: the Army's Nike Ajax surface-to-air missile. Although the weapon is set up at fixed bases, it is designed to be mobile. The Nike's conglomeration of ground support equipment can all be mounted on trailers. For the most part, Nike's vehicles are standard types.

There has been a similar accomplishment with the Army's Dart, an anti-tank missile. The Dart can be fired from almost any Army tank or truck equipped with a special launching device made by the Utica-Bend Corp.

• **Obstacles**—But these are exceptions to the missile rule, for standardization is not widespread. There are several reasons.

One reason, as a top-level Defense Dept. official sees it, is a new procurement procedure in which prime contractors have closer control than ever before over each item supplied to a weapon project by other contractors. The result, says the official, has been a "tendency for primes to design all the support equipment around their own product, with little concern about using stuff already on the shelf."

• **Philosophies at Variance**—The most serious roadblock to effective standardization, however, is the difference in service philosophies on how to operate in the field.

The Army and Marine Corps, for example, think in terms of mobility. They want arms and equipment that can break down into handy packages and then can be parachuted to earth.

The Air Force also has a fetish about hauling gear by air, but it is able to unload material from planes landing far behind combat lines. So its designs have more luxury and less portability than equipment that is parachuted to earth.

The Navy has the advantage of lots of depth for setting up support equipment beneath the missile launcher—a submarine or a ship—and the disadvantages of limited deck space and an unstable launching platform that pitches, heaves, rolls, twists, and vibrates. Its equipment is designed with exceedingly high reload rates and considerable automation in handling. The equipment must also be protected against water, spray, and corrosion. **END**



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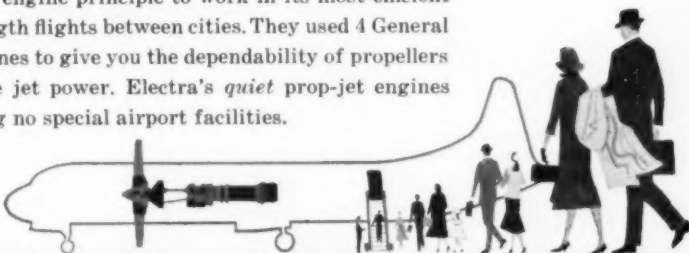
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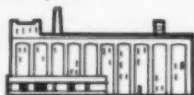
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## How Westinghouse's

To chart the long-range future, Westinghouse's three highest officers—Cresap, Price, and Huggins (left to right, above)—are grouped in a committee.

Westinghouse Electric Corp. closed the 11th year of the biggest expansion in its history last December. But spectacular as that performance was, its arch-rival, General Electric Co., had managed to grow even faster since 1947, when the electrical manufacturing industry took off on a growth cycle that's far from ended.

Since 1947, GE's sales have increased 225%, Westinghouse's 144%. The book value of GE stock, meanwhile, has climbed 152% over yearend 1947, Westinghouse's only 89%. GE's dividends have risen 277%—from 53¢ to \$2 per share—while Westinghouse payments have gone up from \$1.25 to \$2 or 60%. Plainly, both companies profited handsomely from the boom—but

it is equally plain GE profited more.

• **Stronger Foe**—In spite of that relative retrogression, though, Westinghouse may well be a tougher competitor, today, than GE has ever known it to be before.

For Westinghouse last Jan. 2 instituted not only a new top management team but a whole new concept of top management (BW—Dec. 21 '57, p22). The contrast between the old and the new points up Westinghouse's changing problems:

• During the previous 12 years, Gwilym A. Price, then president and now chairman, had been chief executive officer. Simultaneously, he had to solve internal difficulties, expand the plant, and provide the management to go along with a gross volume that doubled in seven years—and has risen more than a third more since then (BW—Oct. 22 '55, p43).

• Today, Mark W. Cresap, Jr. (cover), has succeeded Price as president. Unlike his predecessor, he has only one principal problem—to take a thoroughly refurbished property and



## Three-Man Management Works

make it thoroughly profitable. Under Westinghouse's wholly new arrangement of authority, he shares nonoperating, long-range company problems with the other two members of a committee that is now responsible for many matters Price ran singlehandedly.

### I. Who Runs Westinghouse?

While Westinghouse's new management digs in hard and single-mindedly at the problem of profitability, there are some people, both inside the company and out, who wonder who really runs Westinghouse now.

This arises primarily, of course, from the establishment of the wholly new Policy & Finance Committee, with vast responsibility for long-range planning at the very highest level. Its chairman is Price, the man who picked Cresap for the presidency. Cresap is also a member. Third member is E. V. Huggins, a man price might very well have picked if Cresap hadn't made it.

Huggins also is a vice-president, director, and chairman of the executive

committee of the board. He's responsible for perhaps 20% of Westinghouse volume, since the Canadian, International, and broadcasting companies and the defense products group report through him.

For quite a few reasons—perhaps most important, that he has operated principally out of New York and Washington, not Pittsburgh—Huggins has been relatively unknown. Quite a few people were startled no end at his elevation to the Price-Cresap level.

• **Discarded Title**—Beyond the surprise at Huggins' accession, two other things about the Policy & Finance Committee made outsiders blink. One is that Cresap, other than on strictly operating matters, reports to the directors through this committee rather than directly. The second is that Westinghouse abolished the title of chief executive officer when Cresap succeeded Price as president at the start of this year.

Price had been chairman, president, and chief executive officer. That left no doubt who was boss. Cresap was named president and chief administra-

tive and operating officer. Rightly or wrongly, that leaves some doubt as to who is the one man at Westinghouse today with the absolute last word. If you must have your answer in harsh blacks and whites, you'll find there simply isn't one. If you'll take it in more or less subtle grays, you'll doubtless find that the man with the absolute last word is Price—but only whenever Price figures the company must have such a man.

• **Operating Boss**—That's not to say there's the slightest question about who's operating the company, making the day-to-day decisions, and administering the whole \$2-billion shebang. That's Cresap, of whom Price says flatly: "Mark Cresap is the operating and internal boss of this company. Mr. Huggins is under him as far as operations go, and so is everybody else except possibly Bill Price."

Cresap considers himself wholly unrestricted as the operating boss. "You make a management decision when it has to be made," he says. "It's understood that if I have to make one on the



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spot, I make it. I haven't been impeded in the slightest. . . . If you don't have to decide something on the spot, it's a privilege to be able to talk about it with two competent men of judgment."

The P&F Committee, Cresap points out, isn't required to operate by unanimous vote. Thus far, its operations haven't become so formal as to raise the point, but two votes make a decision if things come to that.

• **Help, Not Hindrance**—Of course, only a nonoperating decision could become thus deadlocked, for the president's authority on operations and administration is total. Of such a potential nonoperating impasse, Cresap says: "If I couldn't sell something to the other two members, I probably couldn't sell it to the board."

Clearly, by implication, the three-man committee that some regard as a curb on Cresap can be an extremely useful tool for him. A Cresap recommendation it approved would be very persuasively presold to the Westinghouse directors. It would bear the imprimatur of the two ranking officers, both of the company and of the board itself.

## II. Planning by Committee

If the function of the P&F Committee is not to limit Cresap's authority, then what is it?

It's to make three of the company's best and most powerful brains available—in concert and yet with genuine detachment—for study of nonoperating problems and for dreaming about where the company should be some years hence.

• **Why a Committee**—Some such group probably should be a must for any substantial enterprise that's in business to stay. At Westinghouse it's peculiarly important, because Westinghouse is one of the biggest and most diverse companies in the United States today. It's in the heavy, expensive capital goods business, and it's in consumer durables. It makes industrial raw materials and components, as well as endproducts for every buying level. It's in the import and export and entertainment businesses, and it's a regulated utility, too.

As a result, it's just about impossible for one man to know the whole business thoroughly and still possess the vision and wisdom to program its future. Price believed, and his directors agreed, that three top men could do that job better than one.

Then there's the grinding pressure of time. Price refers to it constantly.

"It's very difficult," Price says, "to get the time really to think about the company except in odd moments . . . I insist that we sit down and think about





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missed!**

Memphis was a soft-spot in the sales of this manufacturer's underarm deodorants. Yet Memphis is a better year-round deodorant market than Cleveland. So what was more logical, thought the general sales-manager, than transferring Dick Starkler, with his fabulous Cleveland record, to Memphis—?

Dick wasn't eager. It meant a shift for his whole family. It meant selling his home. Finding a new one. Dislocations for the kids, too—switching from one school to another in mid-term.

Dick moved. Not eagerly... but he moved. And right there the disappointments began. Dick's record in the Memphis territory was far below his stellar Cleveland performance. Far below his quota. Far below the potential of the market. It was almost as if he were another man...

The truth is—Dick *was* another man. He *was* having

difficulties in merging his family into the new community, in spite of the noted hospitality and progressiveness of Memphis. And he wasn't getting much help from his company. He was disappointed, disturbed, upset... and those things don't contribute to energetic, imaginative selling!

#### *New Light on Transferring Business Brains*

Greyvan—as a leader in the business of moving households effects for transplanted company personnel—has made the country's first Continuing Study of a real and vital problem: the Human side of personnel-moving.

THROUGH independent research organizations, and through the generous cooperation of leading businesses most experienced in moving their employees, we've found many answers to problems of loss of personnel in re-locating. Our initial findings are yours for the asking...and further data will be forthcoming soon.



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## Pay dirt!...year after year!

No need to head West to find "pay dirt": it may well be going up your factory stacks! It's a fact that Buell Dust Collection Systems, in nearly every case, recover dusts that pay for the entire installation in just a few years!

There's an easy, sure way to find out if this is true in your plant: just ask Buell to make an analysis. Buell engineers will tell you, in a short, accurate report, what dusts are going up your stack, what quantities, and what kind of dust collection system you may need to recover them.

A history of hundreds of installations and many years of experience in field and laboratory backs up every analysis. Performance standards are written into each installation contract.

For more information, write for a copy of the booklet, "The Collection and Recovery of Industrial Dusts." Just write to Dept. 30-E, Buell Engineering Company, Inc., 123 William St., New York 38, N. Y.



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**DUST COLLECTION SYSTEMS**

the company—and not merely put out fires or solve problems . . ."

And such a committee has its mechanical advantages, too. As Cresap says: "P&F Committee sessions are less formal. They have smaller agendas. You can go into a problem at length. Board meetings are shorter, consider lots of topics."

• **What It Tackles**—What are typical P&F problems? They include these:

- Cash projections several years into the future.
- The entire capital expenditure program.
- The long-term outlook for major sections of the business.
- Policies governing management incentive compensation.

Obviously, such topics don't demand specific decisions every time they're looked at. Actually, Cresap says, perhaps only 15% of all the topics that have come before the group thus far have required any decision at all.

### III. Boss Without Paperwork

When you ask Cresap about his job—and how he performs it—you find that he spends 90% of his time out of the office talking with people. Perhaps one hour per week is spent on paperwork—"there's more than that spent on reading, of course, but practically no working through paper." That points directly toward the way he spends his year.

The year starts, actually, in the fall. That's when budgets are compiled, a profit and loss projection made for the following year, capital expenditures approved, and objectives—both financial and nonfinancial—set.

"Hopefully," Cresap says, "you get a financial goal for the year, and the figures to support it, by Christmas."

Cresap's second quarter—January through March—by and large is devoted to letting the principal managers know where the company's headed that year, and what it expects to achieve. The core of this vast communications job is a two-day division managers' meeting in January. Cresap puts on his very hardest to sell then.

The first quarter has other hurdles, too. Some very important time must be spent examining the previous year's performance to determine what the management incentive compensation payment will be. And there's the annual meeting to prepare for. After the annual meeting, he says, "I'll accept any management speaking bid I can get."

• **Months of Visiting**—That's Westinghouse management he refers to. Over the final six months of his year—April to October—Cresap, Executive Vice-Pres. John K. Hodnette, and the product group vice-president whose plant is involved visit every manufacturing location. The point is to carry top manage-



Modern construction is the product not only of engineering and building skills, but of experienced procurement as well. A mountain of parts and equipment—including giant pyramids of bright red hopper bottoms—rises by the railroad siding. Painting by Stanley Meltzoff.

### **The Experience of United Engineers**

is the answer to your need for fast, on-time engineering and construction. In working for clients both large and small, we have time and again proved that our skilled and experienced teams can prevail over the fourth dimension—can complete a project on schedule, and at a cost that is reasonable and carefully controlled. As designers, construction engineers, and engineering consultants, we have demonstrated the cost and timesaving advantages assured by the smooth coordination of engineering design, purchasing, expediting and construction. Best proof of the

success of our operations—and of the satisfaction of our clients—lies in our record of new assignments from those already served.

No matter what the project—steel mill or power plant, processing plant or industrial building, gas plant or pipeline—United Engineers has the skill and creative ability to augment the engineering staff of your own organization.

Our background of more than 70 years' experience is your assurance of getting the maximum return for every dollar expended. We invite you to share and profit from this experience.

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U.E.&C. (Canada) Ltd.

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... and are a gold mine of vitamins and minerals ... And remember...*

*Continental has the  
right <sup>Dairy</sup>  $\wedge$  package for you!*

**CONTINENTAL**  **CAN COMPANY**

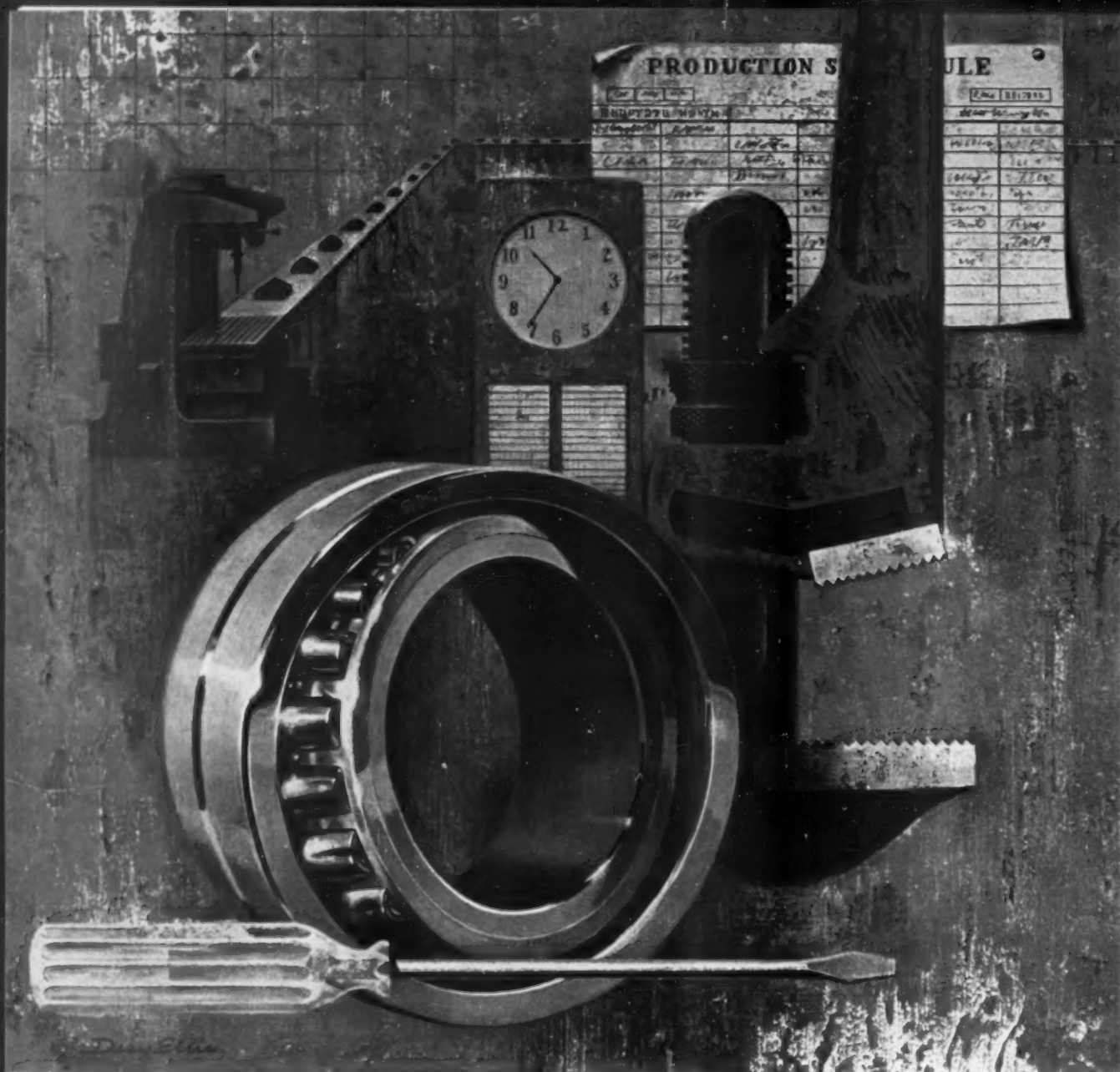


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Continental salutes  
June Dairy Month





## Parts determine maintenance cost

Few parts have so direct an effect on maintenance cost as the bearing. For the bearing is always the focus of action—of wear and tear in any machine—in any plant. The choice of high maintenance cost or low maintenance cost is often made when bearings are chosen. No other bearing producer offers you as much experience in making the right choice as SKF, makers of the most complete line of ball and roller bearings.

7828



ment's program to all management, to inspect the properties, and to give all 11,000 Westinghouse managers, down to and including foremen, an unrestricted chance to question top management (BW-Jul.27'56,p156). That program alone puts Cresap directly in touch with as many as 9,000 Westinghouse managers. It's a keystone in achieving one of his basic managerial philosophies—that management simply must be able to communicate.

#### IV. Wanted: More Profits

In 1951, according to the Dept. of Commerce, the electrical equipment industry ranked third among 22 industries in its rate of return. By 1956, it had sagged to eighth. In spite of that, research and development by the electrical industry continued to cost three times as much, in relation to sales, as the all-industry average. That relationship of earnings to research spending worries electrical manufacturers.

For the electrical industry has been built on research. It's the single thing most responsible for the vast diversification of such companies as General Electric and Westinghouse, and most of their profit today can be traced directly to research spending that has been continuous, decade after decade, for 80 years.

• **Confidence**—But if you're going to spend for research, you first must earn good profits. And it's there that Westinghouse has been having its problems, vast as its postwar growth has been. It was Price who solved them, in fairly impressive measure. Today, he sums up a dozen years of running the property this way: "I've never felt as well about Westinghouse as I do right now—its management, its depth in management, and its future. I intend to see it as successful as any company in the electrical manufacturing industry."

• **Cresap's Answer**—That puts the earnings responsibility directly in Cresap's lap. To meet it, he devoted this year's division managers' meeting to a two-point program, involving profit detractors and managed costs. On the former, he explained in detail how the company is surveying every operation that, after all reasonable explanations are considered, still isn't contributing what it should to profit. Occasionally, such operations simply have to fold. More often, their expenses are tailored to fit their profit prospects.

Managed costs Cresap defines as those that can be affected by management action. The pressure he has put on this program, he concedes, has brought him the nickname "Managed Costs Cresap." But the program was partly responsible for the fact that first-quarter earnings went off only half as far as GE's did. **END**



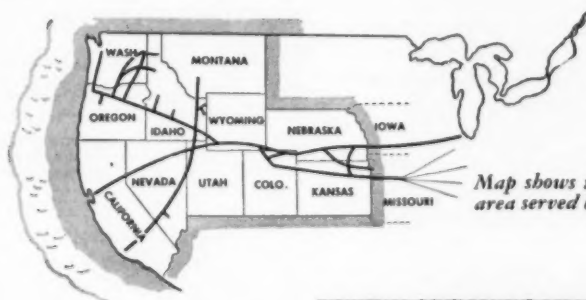
*It's OUR business  
to help YOUR  
business*



We realize that any concern seriously considering building, or otherwise acquiring an additional plant in a new area, has in mind certain definite requirements.

We have up-to-date factual information on available sites in the western states which we serve. In short, we're in position to help you decide on a new location if you will advise us as to your requirements.

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*Map shows the vast western area served by Union Pacific*

INDUSTRIAL DEVELOPMENT DEPARTMENT  
**UNION PACIFIC RAILROAD**  
OMAHA 2, NEBRASKA

## How does capital differ from expense?

from the CLIENTS' SERVICE BULLETIN  
of The American Appraisal Company

Expenditures for plant maintenance have an important effect on net profit and income tax payments. Because practices vary as to the treatment of capital and expense, it is often difficult to compare maintenance costs of companies in the same industry. A consistent capital and expense policy is needed to establish the depreciation provision and to budget and control maintenance costs.

What is capital and what is maintenance?

Capital is any improvement, such as a new building or machine, which has permanence and value. It may be a replacement or partial replacement of such an item, in which case the cost of the item or parts replaced should be cleared from the asset account and the applicable depreciation from the reserve account.

Maintenance expenditures are those required to keep the property in operating condition, and, provided they do not extend the normal useful life materially, are proper expense charges. Maintenance falls into two major categories: (1) preventive maintenance which preferably should be a planned procedure, (2) extraordinary repairs resulting from long deferred maintenance or actual breakdowns.

High preventive maintenance tends to spread maintenance costs evenly over the years and to forestall emergency expenditures which distort earnings in a single accounting period. Although maintenance does not appreciably prolong the life of the property, a high preventive maintenance policy undoubtedly tends to do so. Therefore the main-

tenance policies and accounting treatment of repairs and replacements need to be considered in establishing the life expectancy of the property units on which the depreciation provision is based.

The development of a good property record and a manual governing capital and expense charges is the logical first step toward control of maintenance expenditures.

★ ★ ★

An American Appraisal is a complete inventory and valuation of the property. It is supported by evidence that compels acceptance... and by records that will be available whenever proof is needed. It represents valuation principles that command respect. It is based on The American Appraisal Company's over-60-years leadership in the field of valuation for purposes of insurance, accounting, property control and corporate financing.

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## Home-Made Steel

Ceco Steel, a Chicago fabricator, reverses usual industry practice by building its own primary capacity.

One of the nation's leading independent steel fabricators is upsetting industry custom, with a boost from the recession, by preparing to manufacture a heavy portion of its own steel supply.

Traditionally, the move has been the other way. Principal steel producers sometimes have bought a fabricator and absorbed it into the corporate structure, but few fabricators, except for giants such as Ford Motor Co. or International Harvester Co., have built a mill.

The company going in the new direction is Ceco Steel Products Corp. of Chicago, one of the largest producers of steel joists and reinforcing steel for concrete construction. Ground will be broken in about a month for an \$11-million steel bar mill near Lemont, Ill., southwest of Chicago. Production is to start in the fall of 1959.

• **Timing**—Ceco will use all of Lemont's output—about 10,000 tons a month. The parent firm's tonnage requirements have been large enough for a number of years to justify the new move, Ceco officials say, but it's only in the past nine months that equipment needed for the mill has been obtainable fast—in a year to 15 months. Before the recession, the waiting period would have been more like three years. And cost of the equipment, Ceco feels, will be less than it would have been had the company gone into the venture when it was first considered in the fall of 1956.

• **Sales Boost**—Ceco's sales have been limited for years, the company says, because of its inability to procure enough steel to meet its needs. The new mill will feed its plants throughout the Mississippi and Missouri river basins, the middle third of the U.S. "We're not going into the open market in competition with others," says Pres. Ned A. Ochiltree. "This is for our own end product." Actually, Ceco will still be buying more steel outside—its plants are so decentralized they cannot all be supplied from one point.

Ceco is positive the new mill will stabilize its earnings. "We expect to increase earnings at least 60% and perhaps double them," says Ochiltree. Last year's net income was \$3,038,943 on net sales of \$78,595,292. In 1956, it was \$3,041,468 on sales of \$73,108,114.

• **Cost Balance**—The electric furnace operation will use scrap as raw material. Cost of raw material is lower in depressed periods, with the price of scrap





Mr. W. J. McCuen says: "Lint-free Scott Wipers are ideal for wiping glassware in our lab. They're soft enough for personal wiping—hands and faces—and yet tough enough for such jobs as wiping switchgear units, wiping machine shop lathes, wiping heavy gate valves, and cleaning paint brushes!" Perf-embossed Scott Wipers are also specially treated for extra wet strength.



People buy Scott Wipers for many reasons:

## **Sinclair reduces minor injuries, saves time, with Scott Wipers!**

At Sinclair Refining Company, Marcus Hook, Pennsylvania, 2-ply paper Scott Wipers are used throughout the plant. They store easily in minimum space, eliminate the costs of "return and exchange," and please employees. But a big factor, in the eyes of management, is *employee safety*. Mr. W. J. McCuen, Assistant General Foreman—Storehouse, reports: "These disposable wipers have cut down on minor injuries and lost time. Employees can't cut themselves on clinging chips or foreign particles, using Scott Wipers fresh from the box!" Sinclair has seen a substantial savings in wiping material costs, too . . . with paper wipers reducing (and in some departments eliminating) the number of cloth wipers being used!



Get complete facts and figures on Sinclair as well as other case histories close to your own type of operations! Just call your Scott distributor—in the Yellow Pages under "Paper Towels." Or write: Scott Paper Company, Dept. BW-85, Chester, Pennsylvania.

Maker of the famous Scott paper products you use in your home. See "Father Knows Best" on NBC-TV.





## HOW MUCH MONEY DOES YOUR FIRM SHIP OUT WITH EVERY LABEL?

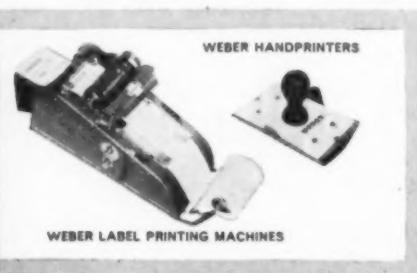


**New booklet tells  
savings story!**

"Assembly Line" Shipment Addressing booklet tells how you can slash advertising costs. WEBER MARKING SYSTEMS, Division of Weber Addressing Machine Co., Inc., Mount Prospect, Illinois.

You don't bundle money up and ship it out in cartons. But if you make multiple shipments to identical addresses and each shipping label is individually typed—your shipping costs are excessive.

Here's how a Weber Marking System saves those costs. A "label-size" stencil is cut as easily and quickly as a girl addresses a single label. The stencil is then placed on a Weber Handprinter (ranging from \$7 to \$31) to print the same address on hundreds of labels—or print them directly on cartons at the rate of 40 to 50 a minute!



**"... Ceco hopes the new mill will 'steady the band' between cost of steel and price for product..."**

**STORY starts on p. 94**

down, the company reasons. But those are the same times in which a fabricator has trouble. Ceco has been paying as much for steel as it ever did, but prices for its own endproduct have dropped substantially in its extremely competitive field. The new mill, it hopes, will "steady the band" between cost of steel and price for product.

Ochiltree hopes that with better control over its raw material costs, the company will be considerably more "depression-proof."

To finance the Lemont project, Ceco obtained outside development capital for the first time in its history. It borrowed \$12.6-million from life insurance companies and banks, of which about \$11-million will be earmarked for capital expenditures and the rest for working capital.

• **Endproducts**—Ceco uses virtually every kind of finished steel, but the Lemont facility will be strictly a bar mill and will make only 30% to 40% of Ceco's tonnage, which runs around 300,000 tons a year.

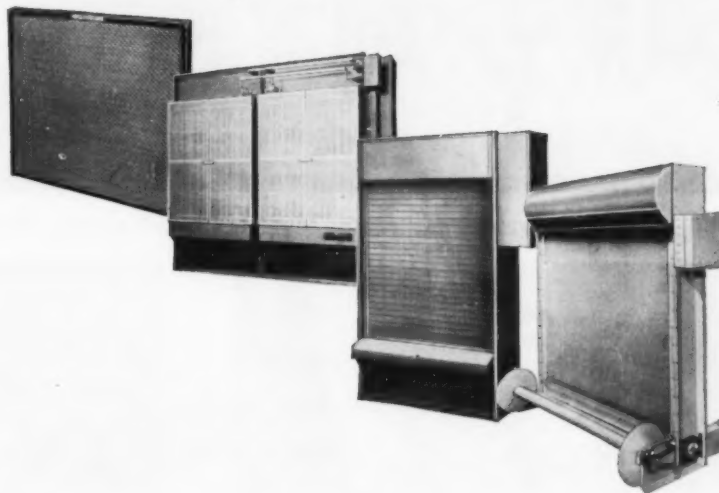
The company makes and distributes structural and related steel products for the building industry. Last year, its record sales went about 80% into industrial, commercial, and public building construction, the balance to the residential field.

Its backlog, \$21-million at the end of 1957, stood at \$24-million by the end of March, as big as it had been a year previously when it reached a new high. Reinforcing steel is the biggest tonnage item and the company feels the erection of its own mill will put it in a favorable position to participate in the new growth of reinforced concrete, will also "greatly strengthen our position as a supplier of reinforcements in the highway field."

• **Setup**—The new mill will melt and cast steel and roll finished steel. It will include two electric arc furnaces (with provision for a third later), a rolling mill, cranes, work areas, and service buildings on an 88-acre site between the Chicago Sanitary and Ship Canal and the Santa Fe's main line, with a 1.5-mile frontage on each, and its own docks, sidings, and roadway.

Access to the canal means low enough transportation rates to make the Chicago area location feasible, according to Ochiltree. Not all the Ceco plants that Lemont will serve are on water, however, and there will be some transshipment on flatcar or truck. **END**

## How efficient should air filters be?



## ...efficient enough to get the job done!

Obviously, you don't want an air filter that isn't efficient enough to remove the dust that's causing you trouble. On the other hand, AAF believes you shouldn't pay for *more* efficiency than you need . . . you shouldn't pay for a filter that removes fractional-micron dust particles *unless those particles are harming your operation.*

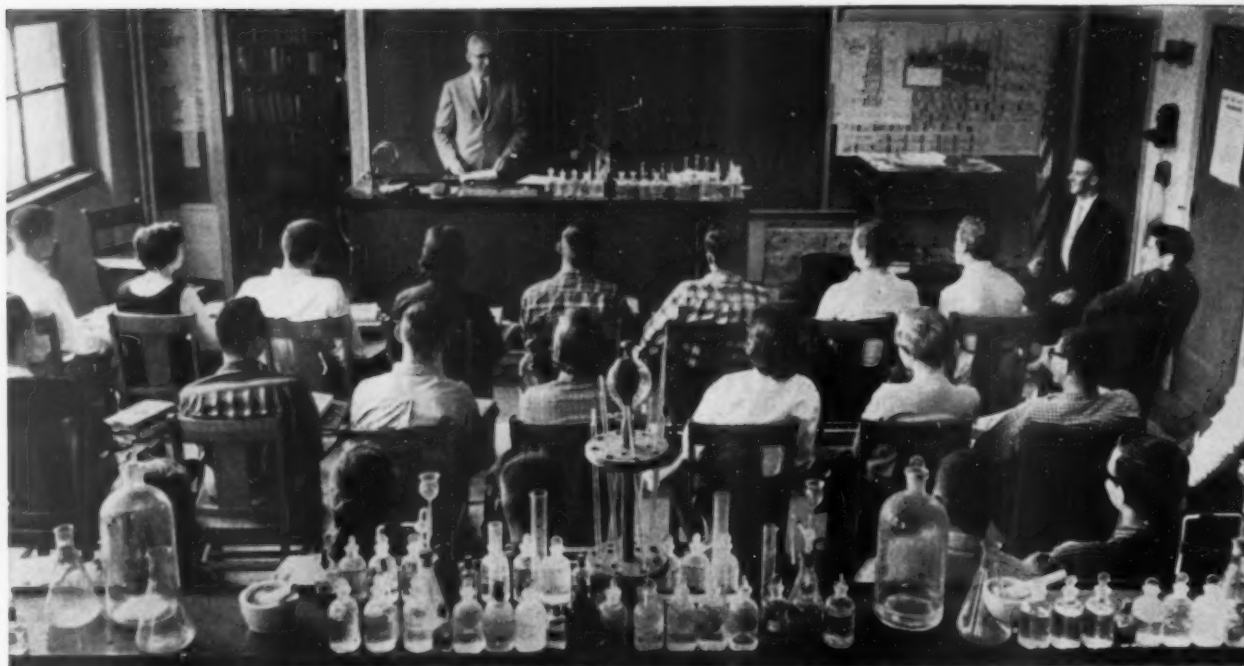
Different conditions require different degrees of

air cleanliness. No one type of air filter can possibly be "right" for all. That's why it's important for you to discuss your air filtration problems with a company that makes *all kinds* of filters.

For more information on the application and operation of AAF equipment, write for Bulletin 510-A. Address: Mr. Robert Moore, American Air Filter Co., Inc., 387 Central Ave., Louisville, Ky.



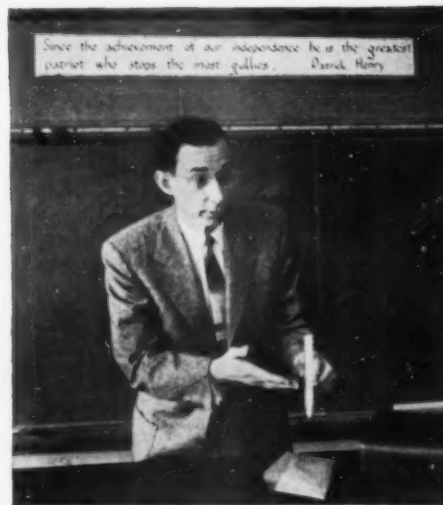
**American Air Filter**  
COMPANY, INC., LOUISVILLE, KENTUCKY



**SCIENTISTS LECTURE** on the practical approach to a scientific career, stress the job opportunities at Dow Chemical.



**ENTOMOLOGIST** explains to tenth grade biology class what causes elm disease, tells of the new gains chemical companies are making in war against plant diseases.



**RESEARCHER** demonstrates principles of capillary action to chemistry students.

## Scientists Man the Classrooms as

Ordinarily, the "teachers" in the pictures on this page should be clad in white lab coats or monkeying with slide rules; and the "scientists" on the opposite page should be handing out assignments to high school students.

This seeming confusion in jobs is taking place at Dow Chemical Corp.'s Midland (Mich.) division and at high schools in the surrounding counties. But it's typical of what's going on all

over the country, as big industry gets more and more involved in community educational programs. In the North, for example, A. D. Little, Inc., Boston engineering and research company, has a team of young science graduates who work part time for the company, and part time as teachers in the local schools (BW-Apr. 19'58, p154). And in the South, Olin Mathieson Chemical Corp. is sponsoring a special course by a well

known Pittsburgh science teacher in the Bayou country of Louisiana.

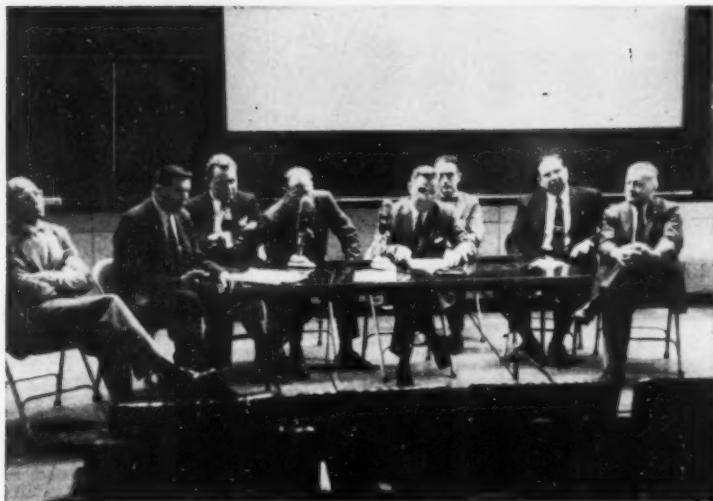
• **Exchange Plan**—Like all chemical companies, Dow has a self-interest in fostering the education of promising young scientists. For several years, it has been sending panels of scientists to high schools to address student assemblies on career opportunities in science.

This year, it took advantage of Chemical Progress Week—when the





**TEACHERS TOUR** Dow plant, meet company's top officials, and hear of the latest developments in the world of science.



**PANEL** of Dow officials and researchers hold a question-and-answer session for the 75 high school mathematics and science teachers who participated in the all-day tour.



**PAROCHIAL SCHOOL** instructors take in a lecture on new developments in chemistry.

## Teachers Hobnob With Science

chemical industry turns the spotlight on itself and its achievements—to inaugurate a new program. Inspired by the Sputnik repercussions on U.S. scientific education, Dow swapped 75 of its scientists for a day with 75 high school mathematics and science teachers.

At the schools, the Dow people fell into the teacher's regular schedule of classes, but they made no attempt to teach subjects. Instead, they answered

questions from young, alert students who wanted to know such things as "What kind of fertilizer should my daddy use on his corn?" and "Why are some people allergic to sulfa drugs?"

• **Dow's Story**—Back at the Dow plant, teachers were learning what's new in biology, biochemistry, mathematics, physics, and chemistry. They got the Dow story in slides, lectures, and a plant tour. They heard Dr. Turner Alfrey,

director of polymer research, and other experts tell of "the impact on science teaching of some new developments in the field."

After that, there were lectures on specific new developments by experts in various fields. At the end of the all-day session, Dow assembled its top researchers and administrators into a panel to answer questions put to them by the teachers. **END**



## You can hold a candle to a Capitol window!

Capitol's aluminum prime sliding window is so efficiently sealed against the elements that wind and water driven at hurricane force cannot get through.

Millions of American homes are made more livable by Capitol aluminum prime windows, window walls, rolling doors and combination insulating doors and windows.

Ingenuity in design and integrated manufacturing are combined at Capitol to produce aluminum products for many diverse fields. Industrial fabricators get aluminum billets from Capitol furnaces, and extrusions from massive Capitol presses. Tankers are using aluminum gangways, catwalks, gratings and hatch covers produced by the Readco

division. You'll find Readco light standards and guard rails on many streets and highways.

This sum of technical ability . . . creative design and engineering skills, complete facilities from ingot to extrusion and fabrication . . . can be put to work wherever light metals are involved.

Readco is a leading producer of commercial bakery equipment, a pioneer in bakery automation. And its mixing equipment is helping to improve processing and lower costs in the chemical, pharmaceutical, food, plastics and paper industries.

This is a dynamic company, Capitol, with a remarkable history of growth . . . and a future as promising as that of light metals themselves.

### CAPITOL PRODUCTS CORPORATION

Manufacturing facilities: Mechanicsburg, York, Philadelphia and Hazleton, Pa.  
Chicago • St. Louis • Sherman, Texas • Anaheim, Calif.



# In Management

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## Sperry Rand Charges Electronics Group With Using Its Ex-Employer's Trade Secrets

Sperry Rand Corp. has brought court action against Control Data Corp., a Minneapolis electronics company. Sperry charges that CDC is using "inventions, trade secrets and confidential processes, skills, knowhow, techniques and technical data" belonging to Remington Rand's Univac Div., a part of Sperry Rand.

Control Data was formed last July by ex-Univac personnel. It is headed by William C. Norris, who had been vice-president and general manager of Univac. Norris and his chief associates in CDC had formed Engineering Research Associates after World War II. They went to Remington Rand when that company got into electronics by buying ERA in 1952.

Sperry Rand charges that Norris organized Control Data while still on Univac's payroll, that he held group meetings of Univac engineers to offer them jobs, and that the new company used ideas that are the property of Sperry Rand.

Control Data has denied the charges, and says that the company has not, is not, and is not planning to use any Univac trade secrets or inventions.

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## Maximum Age for Hiring Office Workers Is Dropping—for Some, It's Below 30

When is a woman "too old" to be hired as an office worker? Companies are giving an increasingly younger age in answer to that question.

Of 148 New York City companies surveyed by the Office Executives Assn., 13.5% said their maximum age is 40 or below; last year, a similar OEA report showed that only 7.6% put 40 as the cut-off age. And a year ago the youngest "too old" was 35; this year, five companies set their maximum age at 30 or below.

Even with lower age maximums, office workers continue to change jobs like a game of musical chairs. A survey by the Chicago Assn. of Commerce & Industry—covering more than 10,000 office workers in 566 concerns—found that 24% of the secretaries changed their jobs last year. Of the stenographers, 34% switched jobs, as did 46% of the typists.

• • •

## Top Executives Keeping Sharper Eye On Their Companies' Purchasing

The brass is getting more involved in company purchases. In a BUSINESS WEEK survey of sales managers in top industrial firms 67% said that among their customers top management is more active in industrial

purchasing than it was just six months ago. Only 5% thought management participation had decreased in that time, and 28% saw no change.

Most of the respondents look upon the increased interest as logical in more difficult times, when every phase of the business has a sharper eye on it. Typical was the answer from Minnesota Mining & Mfg. Co.'s director of sales, L. F. Weyand: "This [increase] undoubtedly reflects management's desire to supervise all phases of its operations more closely—to assure a successful adjustment to the changing business situation."

The "remained the same" answers usually specified that top management involvement in buying had long been the custom in those industries.

• • •

## Status Symbols Are More Important To Woman Executives, Sociologist Finds

The woman business executive has been spotlighted in a new study by Margaret Cussler, University of Maryland sociologist, and found to be much like the male business executive. But Dr. Cussler's new book, "The Woman Executive," notes these differences:

- The status symbols—especially the big office—are more vital to the woman, to let the visitor know that he's not talking to a glorified secretary.
- The woman tends to be more emotional about her job.
- The woman executive tends to isolate her work and social life much more than the man.
- Though pay differentials are disappearing, a lot of firms still pay the woman less than they do men in similar positions.

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## Management Briefs

Squabbles over Best & Co.'s executive stock bonus plan have been settled. Bankers Securities Corp., which claims to be the largest single Best holder, had threatened court action unless management "put some standards in" the plan (BW—Apr. 19'58, p163). It has now been amended to prevent the use of unissued stock and to limit participants' annual bonuses to 20% of their total compensation.

To get a novel cover for its 1957 annual report, Great American Industries, Inc., Elyria, Ohio, maker of rubber products, held a contest among art students at Oberlin College. The creator of the winning design won 20 shares of stock (selling around \$2). Her theme: an abstract impression of industrial flow (the company has a materials-handling division).

The Glen Alden Corp. purchase of the assets of List Industries Corp. still hasn't gone through. The proposal (BW—Mar. 15'58, p61) was first put to stockholders at an Apr. 11 meeting, but stockholders of both companies started court actions. The companies want to get them settled before finally approving the plans. So far the company stockholders have met three times, hope the court actions will be decided by the May 23 meeting.



## Coal scores with Notre Dame

### University power plant burns coal for modern steam generation

Building expansion had put a strain on the power plant at the University of Notre Dame, South Bend, Ind. After careful study—by the firm of Albert Kahn Associated Architects and Engineers, of Detroit—a decision was made to modernize coal-fired steam facilities and add power generating equipment. Maximum efficiency is achieved through automatic combustion control and complete instrumentation. Today steam is generated *economically*. Another result of these innovations has been the *cleanliness* of operation

... making Notre Dame's power plant a model of good housekeeping.

#### Consult an engineering firm

If you are remodeling or building new power facilities, consult a qualified engineering firm. Such concerns—familiar with the latest in fuel costs and equipment—will effect great savings for you in efficiency and fuel economy over the years.

#### Facts you should know about coal

Not only is bituminous coal the lowest-cost fuel in most industrial areas, but

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## FINANCE

# Profit Margins Keep Dwindling ... and It Hurts

	Year of 1956	*PROFIT MARGIN TREND			OPERATING RESULTS			
		1957 First Half	1957 Last Half	1958 First Quarter	1957 vs. 1956 (Yearly Figures)		1958 vs. 1957 (First Quarter)	
					Sales	Earnings	Sales	Earnings
Allis-Chalmers	7.8%	8.3%	4.6%	4.0%	- 2%	-12%	-13%	-55%
Amer. Radiator	#4.9	#3.0	#3.9	#1.8	- 8	-36	-12	-56
Atlas Powder	#6.3	#5.7	#6.2	#3.5	+ 4	- 2	-12	-45
Babcock & Wilcox	10.4	10.5	6.9	5.0	+31	+ 1	+ 7	-41
Burroughs Corp.	11.2	7.6	5.1	3.4	+ 4	-29	- 1	-66
Caterpillar Tractor	#8.1	#7.4	#4.5	#2.7	- 5	-28	-32	-77
B. F. Goodrich	12.0	10.6	10.1	7.5	- 1	-10	-12	-38
Goodyear T. & R.	9.5	10.3	8.3	6.9	+ 5	+ 4	-12	-37
Gt. Northern Paper	16.7	11.2	4.5	0.1	- 6	-52	-25	-96
Hammermill Paper	16.7	8.8	10.9	6.9	-10	-48	+ 3	-41
Johns-Manville	14.3	10.4	8.8	5.0	- 1	-29	-10	-36
Link Belt	#6.8	#6.2	#6.1	#3.7	- 1	- 9	-14	-48
Mack Trucks	#4.8	#4.6	#3.6	#2.1	+ 4	- 9	-20	-62
Minerals & Chemicals	19.6	14.6	4.7	6.0	+ 3	-54	-12	-62
Minn. Mining & Mfg.	23.0	21.6	19.7	18.7	+12	+ 3	- 5	-18
Monsanto Chemical	12.8	14.0	9.5	8.2	+ 5	- 3	-13	-49
Nat'l Gypsum	#9.4	#8.9	#9.2	#6.6	- 7	-10	- 8	-32
Olin-Mathieson	#7.5	#6.8	#5.5	#3.5	- 1	-19	- 6	-55
Pitts. Coke & Chem.	16.2	13.6	6.1	2.4	- 9	-30	-25	-77
Poor & Co.	#4.8	#5.0	#2.8	#3.0	- 9	-22	-30	-50
H. K. Porter Co.	#5.4	#4.4	#3.9	#1.8	+ 9	-16	-16	-64
Radio Corp.	7.1	7.1	6.1	6.5	+ 4	- 4	- 6	-30
Rayonier, Inc.	18.2	11.3	7.8	6.6	-15	-55	-15	-76
Robertshaw-Fulton	12.3	14.6	8.9	8.8	- 2	- 7	-16	-51
Rockwell Mfg.	#8.2	#7.8	#7.2	#3.0	+ 7	+ 3	-20	-66
Simonds Saw	20.1	16.6	14.3	8.9	-10	-29	-23	-55
Square D Co.	#11.4	#8.8	#8.4	#6.4	+ 2	-22	-11	-43
Stanley Works	10.8	9.0	7.3	4.1	- 4	-34	-14	-64
Sylvania Elec. Prod.	#4.5	#2.9	#4.4	#1.6	+ 3	-15	-18	-62
Tidewater Oil	8.2	7.4	3.2	0.7	+12	-10	-15	-93
Thompson Prod.	8.8	8.9	4.4	5.4	+20	- 8	-25	-52
Union Bag-Camp.	27.0	24.5	21.5	19.2	- 1	-16	- 6	-29
Union Carbide	22.1	20.1	17.3	15.0	+ 5	- 9	-17	-36
U. S. Rubber	7.1	7.0	6.1	4.5	- 3	- 7	-15	-52
Yale & Towne	#4.9	#4.1	#3.1	#2.4	+ 5	-22	- 8	-54

N.B. All base figures exclude mentioned nonrecurring items. \*Pretax profits in percent of sales. #After-tax earnings in percent of sales.

## Cost Surgery Helps Ease Pain

It's the "inflexibility" of costs and their steady rise that is squeezing profits, companies find; many companies hesitate to use the ax—and many costs just can't be cut—but others are going at it in a big way, with much success.

As business raced ahead to new sales and profit records year after year since World War II, the nation's corporate managers kept a loose hand on the cost reins.

One reason, explains an officer of a major capital goods manufacturer: "We had our hands full trying to meet demand; we just didn't have the time to worry about costs."

But when the sales pace slowed down, while costs kept on rising, companies began to feel the pressure in a sensitive spot—their profit margins (that is, profits as a percent of sales before taxes)—and the result is shown in the table above. That's when company managers began grabbing the cost reins with both hands and giving a powerful tug—and they are still tugging hard,

though sometimes without much effect. • **Company Story**—Pres. Gilbert W. Chapman of Yale & Towne Mfg. Co. tells the story for his own company. A few years ago, he says, "Yale & Towne was going through a terrific expansion program. Thus our position was hidden—expansion costs obscured regular costs, so what was happening to profit margins wasn't readily apparent." As soon as sales and earnings began turning downward, Yale & Towne could see clearly how profit margins were shrinking, and how this was affecting earnings.

In the first quarter of this year, Yale & Towne's margin of profit—in this case, profits as a percent of sales after taxes—was only 2.4%, compared to



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3.1% in the last half of 1957, 4.1% in the first half of 1957, and 4.9% for 1956. One result: Earnings in the first quarter of 1958 plummeted 54% under the year-earlier period, on a drop of 8% in sales. In 1957, despite a 5% rise in sales over 1956, earnings fell 22%.

• **Pattern**—This pattern appears in company after company. With only a handful of exceptions, the table on page 103—a sampling of U.S. industrial corporations that have issued first-quarter reports—shows that profit margins have been shrinking steadily for at least the last two years (BW—Dec. 28 '57, p47).

The National Industrial Conference Board, in a study of 1,835 manufacturing corporations, found that the profit margin of most industries—in terms of profits as a percent of sales after taxes—definitely narrowed for the full year 1957. Of 36 industries for which figures could be extracted, NICB found 25 with smaller profit margins in 1957 than in 1956, two that had held even, and only nine that had expanded.

The First National City Bank made a similar study covering 596 manufacturing companies for the first quarter of 1958. It found that average net profit margins—profits after taxes as a percent of sales—narrowed to 5.5% from 7.3% in first-quarter 1957. The reason, as First National City reports it: "... relative inflexibility of costs."

• **Squeeze**—Profit margins, as every businessman knows, exert tremendous leverage on earnings. A small bulge in profit margin usually improves a company's earnings, even if sales stay even or drop slightly. If sales go up, this same bulge can push earnings skyward. The reverse, of course, is also true; if the margin of profit narrows in a period of declining sales, earnings may sink sickeningly.

That is what is happening to many companies today. P. T. Egbert, president of Alco Products, Inc., anticipates that his own company's second-quarter earnings will end up about the same as a year ago; but he says:

"There is no doubt that profit margins are under very great pressure today. When ... profits are squeezed to the point where they are inadequate ... industry is in trouble."

Egbert attributes the squeeze mainly to "the increased cost of doing business." These costs, Egbert told Alco stockholders a few weeks ago, include higher material costs; labor costs, rising under pressure from unions for a continually larger share of the profit dollar; and rising taxes.

Such complaints are echoed by many company officers. Pres. L. L. Colbert explains Chrysler Corp.'s loss of \$1.74 per share in first-quarter 1958, against earnings of \$5.34 per share in first-quarter 1957, this way: "The principal



Melvin C. Holm, Vice President and Treasurer, Carrier Corporation

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## Significant Figures from the Annual Report

	Dec. 31, 1957	Dec. 31, 1956
Total operating revenues .....	\$31,152,960	\$28,252,870
Net income .....	651,040	1,945,846
Preferred stock dividends declared .....	98,650	98,650
Total assets .....	45,477,216	46,077,061
Property, plant and equipment—net .....	37,191,758	37,256,340
Current assets .....	7,759,777	8,762,004
Current liabilities .....	4,933,477	5,042,988
Long-term debt .....	24,198,260	25,981,300
Earned surplus .....	2,846,684	2,294,294
Paid-in surplus .....	6,722,531	6,722,531
No. 4% preferred shares (\$50 par) .....	49,325	49,325
No. common shares .....	2,755,413	2,755,413

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Tempered	Brass Coated
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factors . . . were the sharp decline in automobile demand and the continued high costs of doing business." Trans World Airlines, Inc., attributes its heavy first-quarter loss, despite record high revenues, to " . . . the squeeze of rising costs."

• **Reluctant**—Despite the squeeze, many companies are less than enthusiastic about wielding the ax on costs. Some company officers feel that the present recession is only temporary, and that a strong cash position will tide their companies over until business turns upward. Some companies, of course, have not yet felt an earnings decline, despite narrowing profit margins.

A good many company officers, too, feel there's not much they can do about reducing "inflexible costs." A top officer of one big Eastern manufacturer admits: "We've been pretty casual about our cost-cutting program; we're not handling it in an organized, disciplined manner."

• **Ax-Happy**—Other companies, however, are attacking the cost problem more seriously. Some examples:

• **Philco Corp.** last week announced a 5% to 10% pay cut for 4,000 salaried workers.

• A major instrument maker reduced the work week for salaried employees by three hours, thus cutting payroll costs for an annual saving of about \$500,000.

• **Yale & Towne's Pres. Chapman** called 35 of his top managers to a two-day meeting in Princeton, N. J., to re-appraise policy governing inventories, capital spending . . . and costs. "We began to see results almost immediately," says Chapman.

• **American Machine & Foundry Co.** is running "work simplification" programs for foremen in more than a dozen plants. In the first six plants where this was done, the company says, it saved \$215,000 a year in production costs (BW—Sep. 7 '57, p. 77).

• One big company, with a major part of its business in capital goods, has been quietly cutting salaries and allowing the work force to shrink by attrition, in addition to layoffs. It has also moved the management staff of its manufacturing division closer to its plants.

• **TWA** successfully reduced general administrative expenses in the first quarter of 1958 by "rigid internal economics."

• Management men are taking lessons in cost reduction. The American Management Assn.'s last two courses on the subject were filled from a waiting list, and sales of books on cost cutting have leaped upward.

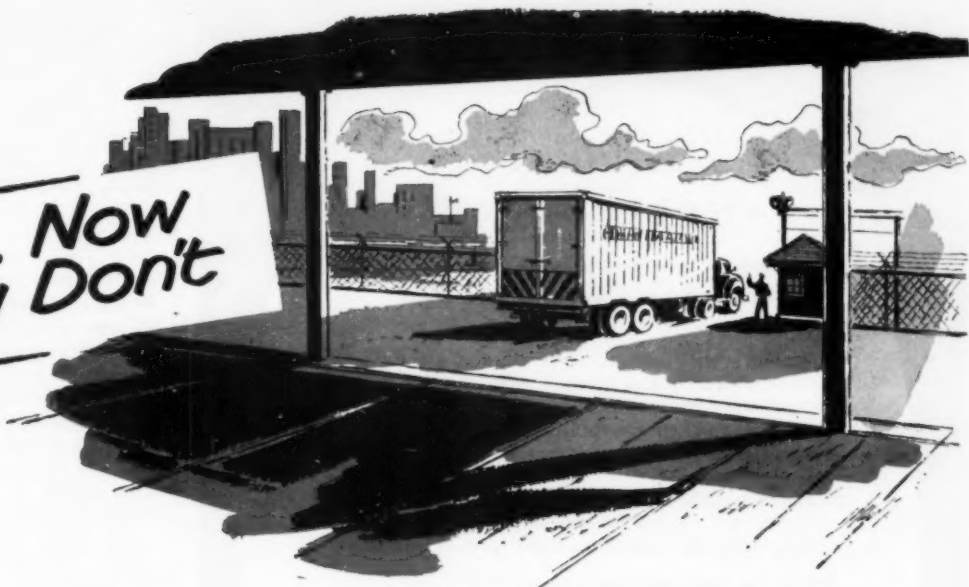
• **Obstacles**—Some costs, of course, aren't easily cut. These include labor costs, transportation, maintenance. Fixed charges due to heavy borrowing—at relatively high interest rates—for



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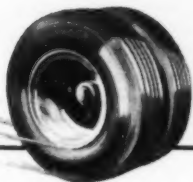


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plant expansion and modernization are also hard to chip away. The huge expansion programs have also pushed up depreciation charges.

Companies hesitate, too, to use the ax on expenditures for research and development. The nation's manufacturing companies this year, in fact, plan to spend more than \$7.9-billion on R&D, against \$6.9-billion in 1957. W. L. Little, chairman and president of Bucyrus-Erie Co., of South Milwaukee, Wis., attributes the company's loss in the first quarter of this year to "unusually heavy expenses incident to product development, industrial engineering, expansion and modernization programs."

Start-up costs on new plants also impose a heavy—but necessary—cost burden. Emory T. Clark, president of Clark Oil & Refining Corp., Milwaukee, for example, says a major reason for decline of its first-quarter earnings was the "unavoidable" nonrecurring cost of starting up the company's new refining units in Chicago.

• **Price Medicine**—Many companies have been taking the other tack, and raising prices to customers to try to offset rocketing costs. This, of course, is partly self-defeating, since general price increases are eventually felt by industry across the board. And in a time of lessening demand, competitive pressures make companies think twice before hiking prices.

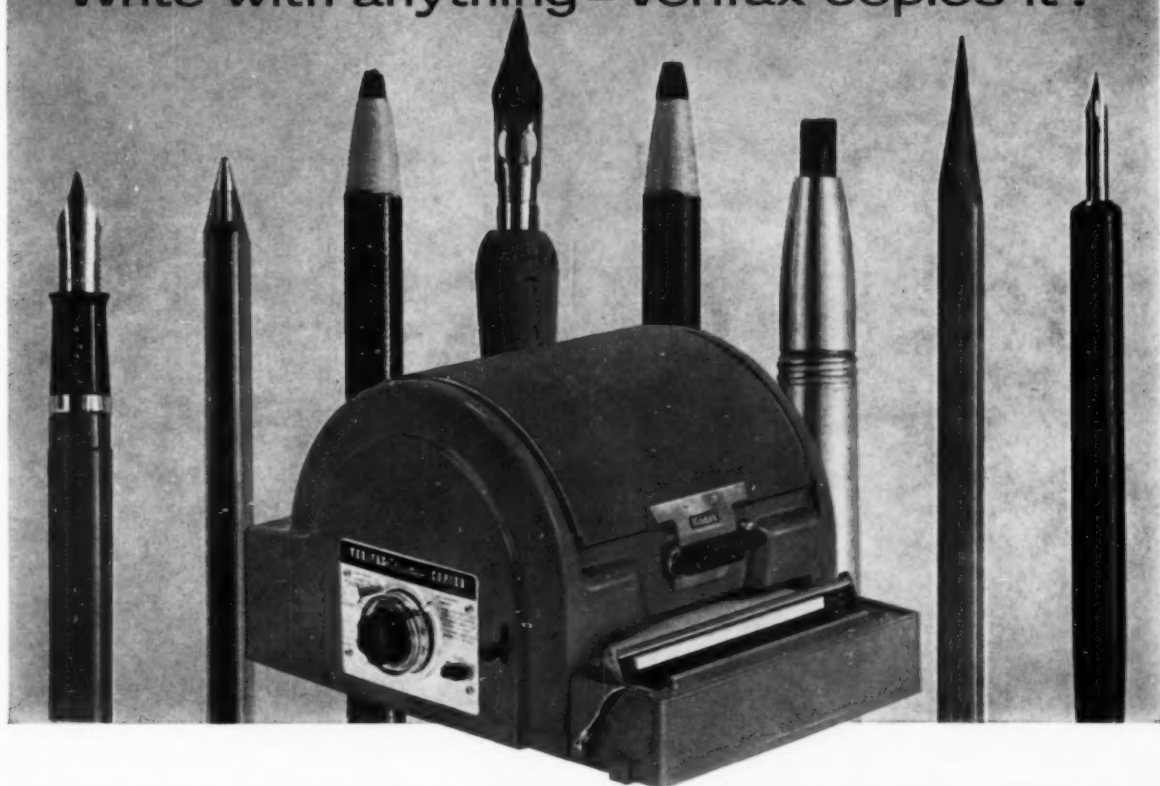
Roy L. Reiersen, vice-president and chief economist for Bankers Trust Co., New York, told bankers at last week's conference of the National Assn. of Mutual Savings Banks: "The inability to pass on increased production costs in higher prices is placing a sharp squeeze on profit margins and earnings."

• **Respite?**—Despite all the obstacles, many economists and business analysts feel that a proper approach to cost cutting will turn up savings. Henry Keyserling, partner in the management consulting firm of Cresap, McCormick & Paget, advises: "Don't cut across the board. Pick the significant areas . . . then attack."

Though first-quarter results indicate continuing pressure on profits, some business observers see signs of respite to come. The Federal Reserve Bank of New York, in its just-published monthly review for May, says:

"Industrial materials prices have been tending lower, and some equipment and similar items are becoming available below list prices. Furthermore, recent data suggest that wage costs (per unit of output) also may have turned downward, reflecting such factors as the installation of new machinery, the sharp reduction in overtime work at premium pay, and, quite probably, the greater efficiency to which the recession has spurred both management and labor." **END**

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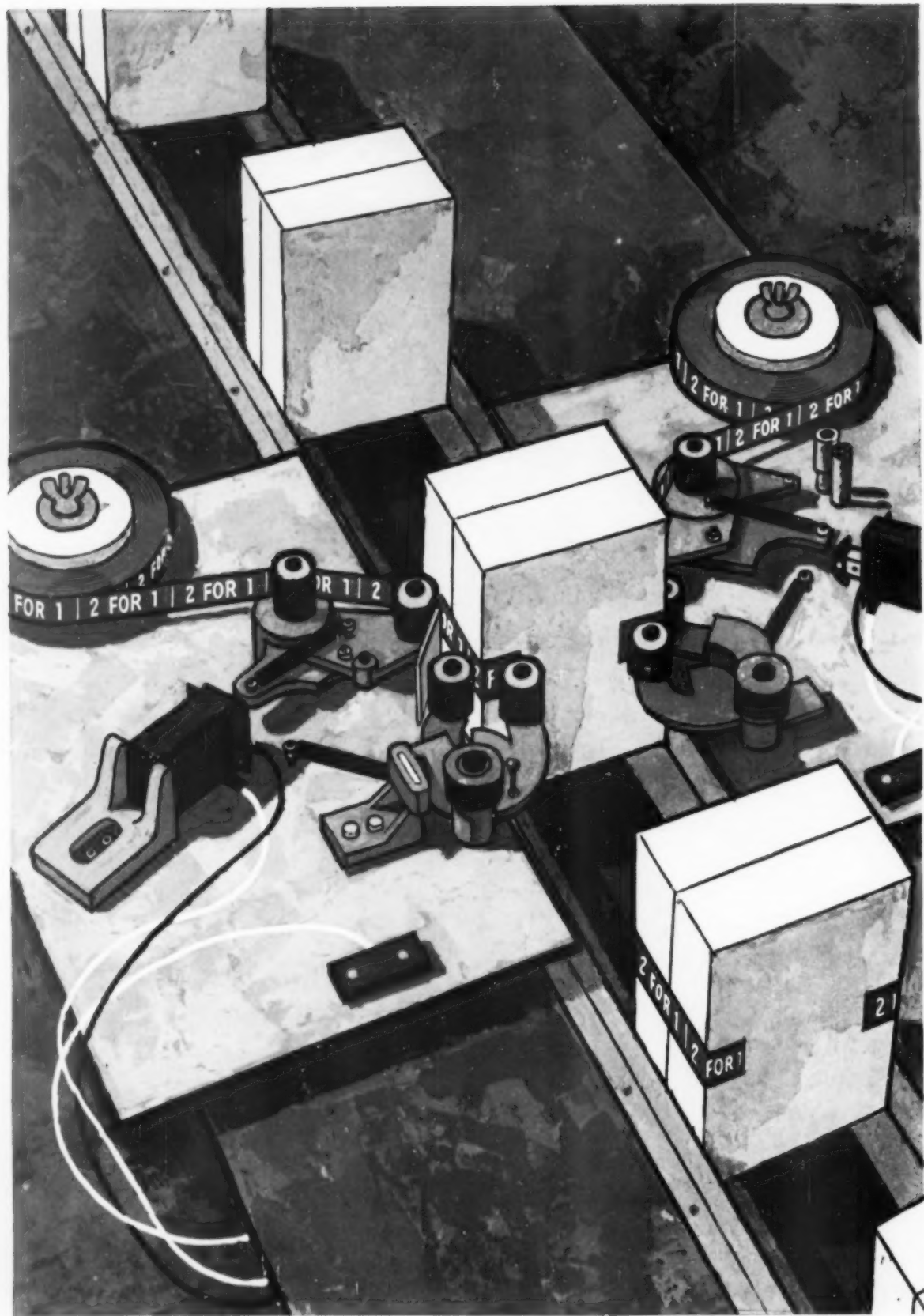
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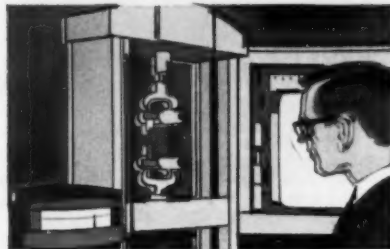
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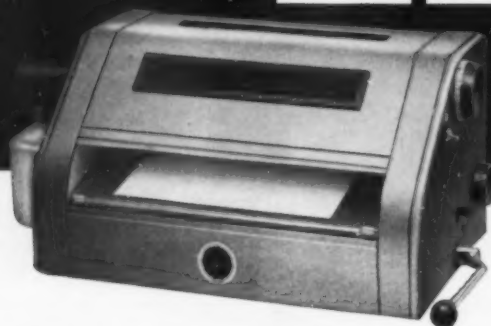


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## Wall St. Talks . . .

. . . about a job for  
Wilma Soss . . . more divi-  
dend cuts . . . and Moody's  
comments on them . . . the busy  
rumor mill . . . new trust fund.

"If you can't lick 'em, etc. . . ." Wilma Soss, No. 1 female heckler at stockholder meetings, is the emcee of a new radio show sponsored by Bristol-Myers, the big drug company. Streeters hear Miss Soss' job is to "humanize the corporate image."

**Chopping the dividends.** Cuts in quarterly payouts announced last week included: Sheller Mfg. (auto, aircraft parts) to 20¢ a share from 35¢; Belden Mfg. (insulated copper wire) to 40¢ from 60¢; Kawneer Co. (metal store fronts, appliance parts) to 10¢ from 20¢; Allis-Chalmers Mfg. to 25¢ from 50¢; Gulf, Mobile & Ohio RR—its second cut this year—to 10¢ from 25¢.

**Speaking of cuts, Moody's says,** "By our preliminary compilation, our 125 industrial stocks average will show only about \$7.35 a share earned (annual rate) in the first quarter. With the dividend at \$5.79 a share, this makes an over-all payout of earnings of nearly 80%—a thin margin of safety."

**Plenty of rumors are cooking.** Among the reported mergers are: Congoleum-Nairn, Empire Millwork, and E. L. Bruce; Servel and U. S. Industries; Elgin National Watch and General Transistor; Union Carbide and Spencer Chemical; General Dynamics and Haveg Industries. Other gossip predictions include: a big new debenture issue by Boeing Airplane; a 15% stock dividend by Otis Elevator in June, on top of a cash payout; an American Express invasion of the credit card field, in competition with Diners' Club, Inc.

**Another new open-end trust fund** will be born soon, the fourth in recent months. The investment trust—Missiles-Jet & Automation Fund, Inc.—is expected to offer the public 500,000 shares, at \$10 each.

**Ten "merger" and "sale . . . possibilities"** are advertised in an offering sheet circulated by a Big Board firm. Nine of them are companies seeking mergers, the majority offering assorted "loss carry-forward" credits as a lure. The 10th is a client who wants to buy "control" of a "substantial life insurance company."



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Yet this glamorous 2-door Savoy Hardtop (above) actually costs you less to buy! It's the *lowest* priced hardtop in the low-price 3, listing for \$104 less than one competitive hardtop, \$49 less than the other. Even under top-of-the-line 4-door sedans!

This bold beauty will also snap up salesmen's morale—rub off confidence on customers and prospects. It should turn in low "expense accounts" for gas, maintenance, minor repairs. And it promises to return more at resale.

Better see your Plymouth dealer today!

Why take less! Why pay more! Get *Plymouth*





FOUNDER of the banking empire (map) is Abdul Hameed Shoman. Trained in U.S. business for 18 years, he is . . .

البنك العربي  
المحدود

Arab Bank Ltd.



## Banker to the Arab World

By Middle East standards, Abdul Hameed Shoman (picture) is a maverick. Despite chronic political and economic feuds among Arab states, he has built a commercial banking empire that stretches from North Africa to the Persian Gulf (map).

His Arab Bank, Ltd., has 36 branch banks in 10 Arab countries—and negotiations are under way for still another branch in Rabat, Morocco. The very fact that Shoman has not confined his banking organization to one or two countries sets him off as an adventurer among Arab businessmen.

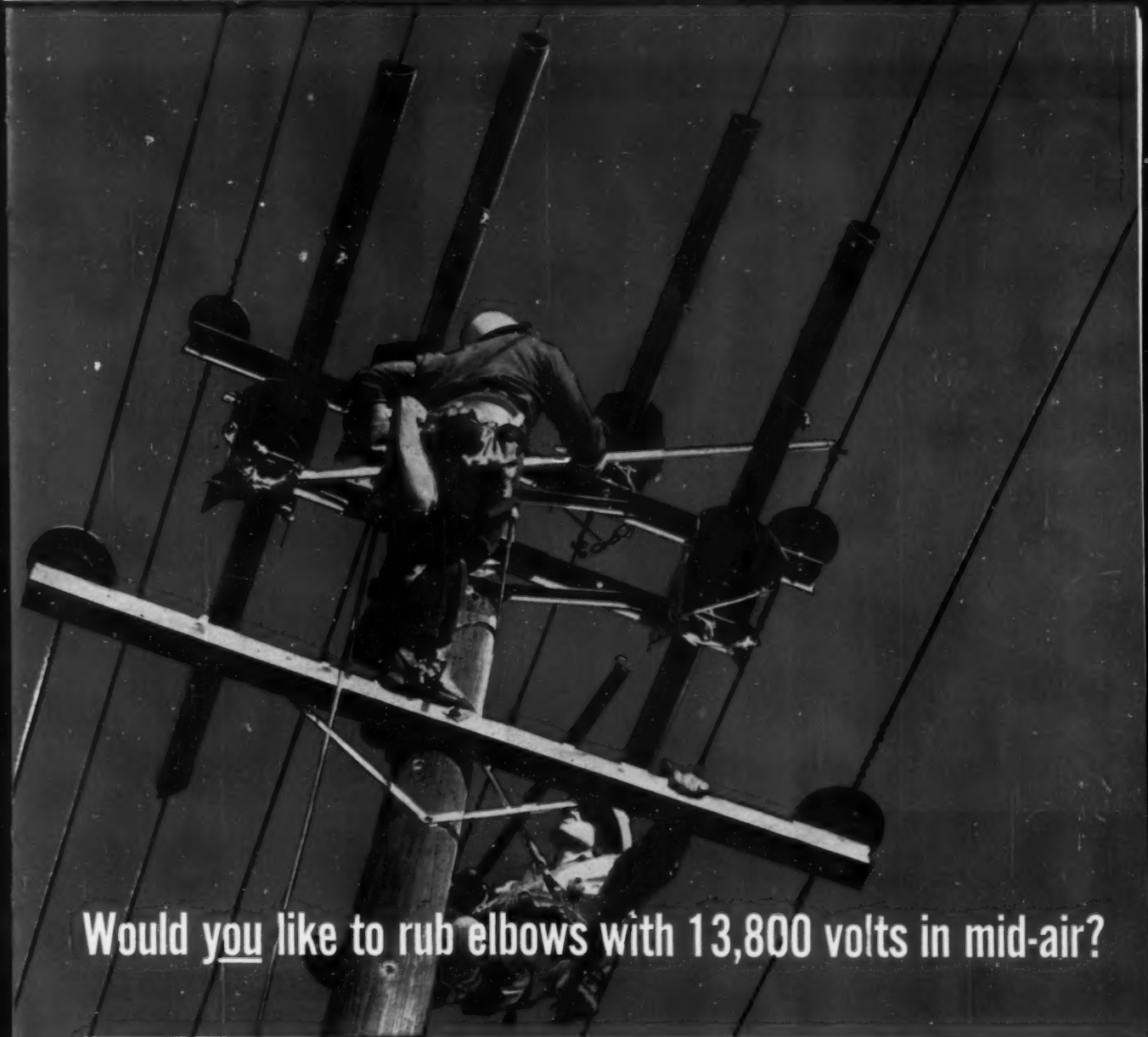
Moreover, the Arabs never had a banking tradition—until Shoman organized his Arab Bank. Now—28 years since its founding—the bank boasts \$124.7-million in deposits. It does an annual business of around \$180-million in guarantees and credits for export-import trade. Its clients include not only leading Arab businessmen, but also foreign companies that operate in the Middle East, such as Pan American World Airways and the Arabian-American Oil Co. (Aramco). It has a close working relationship with the Chase Manhattan Bank, which last year extended it roughly \$5-million in credit.

• **Political Sand**—This week, a shift in



BRANCH BANK of the Arab Bank stands on one of the busiest intersections in downtown Beirut, Lebanon. Beirut, a big commercial center, has some 40 local and foreign banks.





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### The Chase Manhattan Bank

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the political sands of the Middle East presented Shoman with new problems. Jordan, where the Arab Bank has its head offices, and neighboring Iraq officially merged into the Federal Arab State. The new state is a formidable rival to Pres. Nasser's United Arab Republic (Egypt and Syria).

While it creates new political difficulties, the merger will indirectly help the Arab Bank financially—Shoman now is backed by the Central Bank of Iraq.

#### I. Financing Growth

The Arab Bank's rapid growth has come partly from the postwar boom in Middle East oil production. The new oil wealth in the region has increased the demand for imports and has boosted construction of roads, dams, buildings, and small factories.

In the early days of World War II, the bank had only six branches. By the time the Palestine war broke out in 1948, it had 13 branches. Since then—with the speed of a fast-growing retail store chain—the bank has expanded to 36 branches, including three opened in the past few months. It has gone into the remote, oil-rich towns along the Persian Gulf where even foreign banks fear to tread.

- **Where the Money Goes**—The Arab bank's loans rose sharply last year—\$71.2-million compared with \$52.4-million in 1956. More than 18% of this loan volume went to the garment trade and spinning and weaving industry. Around 15% was lent for imports in each of four categories—foodstuffs, building materials, vehicles, and engines. Government and public enterprises got nearly 10% of the bank's loans; agriculture took more than 6%.

Besides financing day-to-day imports and exports, the Arab Bank has supplied working capital for new industries in the more advanced countries. It has helped set up glass and cement works, textile mills, and a sugar refinery in Syria; a plywood factory and sugar refinery in Tripoli, Lebanon; and spinning and weaving plants in Alexandria, Egypt. It has financed local contractors who work for the government and oil companies in Saudi Arabia.

The bank is also a founding member—with the Jordanian government—of the Jordan Potash Co., which plans to extract potassium fertilizers from the Dead Sea, and the Jordan Petroleum Refining Co., which is scheduled to put up the country's first oil refinery.

- **Pioneering**—In addition, the Arab Bank has been a pioneer in setting up other banks. It has helped establish the Agricultural Credit Bank of Lebanon; the Arab Land Bank, active in Jordan and Egypt; and the Development Bank of Jordan.

Of course, the trend in most Arab



## Burned out Saturday! Business as usual Monday! ...thanks, mostly, to our Hartford Group Agent

(Based on Company File #H54-25820)

Last-minute weekend shoppers made a fast exit when fire broke out in our store Saturday night.

We turned in an alarm at once. But by the time the fire was under control, the place was pretty much of a mess. We figured we were out of business for weeks.

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They authorized immediate repairs. Most important, naturally, were the structural work and the electric wiring. They helped us line up contractors who could start work that night. Both agent and adjuster spent practically all day Sunday on the premises. Under their watchful eyes, the work went forward without a hitch.

We managed to re-open Monday morning. We weren't in top shape. But we were doing "business as usual" just 36 hours after the fire . . . thanks to the splendid help of our Hartford Group Agent!

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As you can see, there was no lost time here. No lost motion.

There are situations, of course, that take longer than 36 hours to straighten out. But prompt claim service is always a Hartford objective. And one that has the solid support of 33,000 competent Hartford Group Agents across the country!

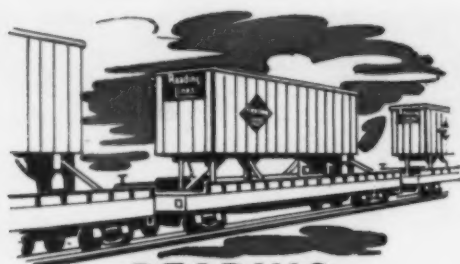
For the dependable protection you need — combined always with the Hartford type of friendly, time-saving service—call your Hartford Group Agent or your insurance broker today.

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## READING RAILWAY SYSTEM



**SON OF FOUNDER** is Abdul Majeed Shoman, managing director and deputy to his father. He, too, was trained in the U. S.

countries is toward more state control of industry and commerce—partly because of government oil income. But the Arab Bank, as a 100% private enterprise, has tried as much as possible to help private industry.

### II. U. S. Style

The most remarkable thing about the bank is that it was started at all. Thirty years ago, European banks dominated the financial world in the Middle East. The Moslem religion regarded interest as usury and an unpardonable sin. Thus, the only Arab "bankers" were native, non-Moslem money changers. Even now, the Arab Bank's branches in Saudi Arabia do not charge interest, but only accept a commission on overdrafts. Yet the attitudes toward money lending have changed so much recently—partly because of Shoman's work—that his bank gets a fat 7% to 12% interest on loans in most Arab countries.

You can trace much of Shoman's efficiency and determination in setting up a bank to his close contact with American business. Born near Jerusalem, he went to the U.S. in 1911 at the age of 23. He peddled goods in Baltimore, then opened a store selling Arab merchandise to immigrants from the Middle East, and finally turned wholesaler for imported goods.

• **Beginning a Bank**—From his 18 years here, he realized that banks were essential for economic prosperity. His native Palestine relied on foreign capital, which would be withdrawn at the first warnings of political disturbances.

Shoman tried to whip up enthusiasm here for an Arab-American bank. Unsuccessful in this scheme, he agreed with an Egyptian financier to found a bank





## Man with stapler beats man with hammer and nails 2 to 1

Both men in the picture know roofing. But in this roofing race, one man lays asphalt shingles with conventional hammer and nails. The other uses a Bostitch H4 Heavy Duty Stapling Hammer.

With every easy swing of his arm, the man with stapling hammer drives a three-quarter-inch galvanized staple through the shingle and into the wood beneath. Six staple-driving swings and a shingle's secure . . . while the other man fishes nails, positions them and finally pounds them in place, at half the speed.

Outcome: The man with the stapling hammer lays twice as many shingles as the man with the hammer and nails, in the same time.

The builder says: "A good man can now lay twice as many shingles a day with the Bostitch H4 as with hammer and nails—sometimes more."

Builders also use H4 staplers to apply metal lath to studding and to apply siding. They use them because Bostitch staplers save them time and money—and help them build better, too.

**See your building supply dealer for Bostitch building tools**

**Fasten it better and faster with**

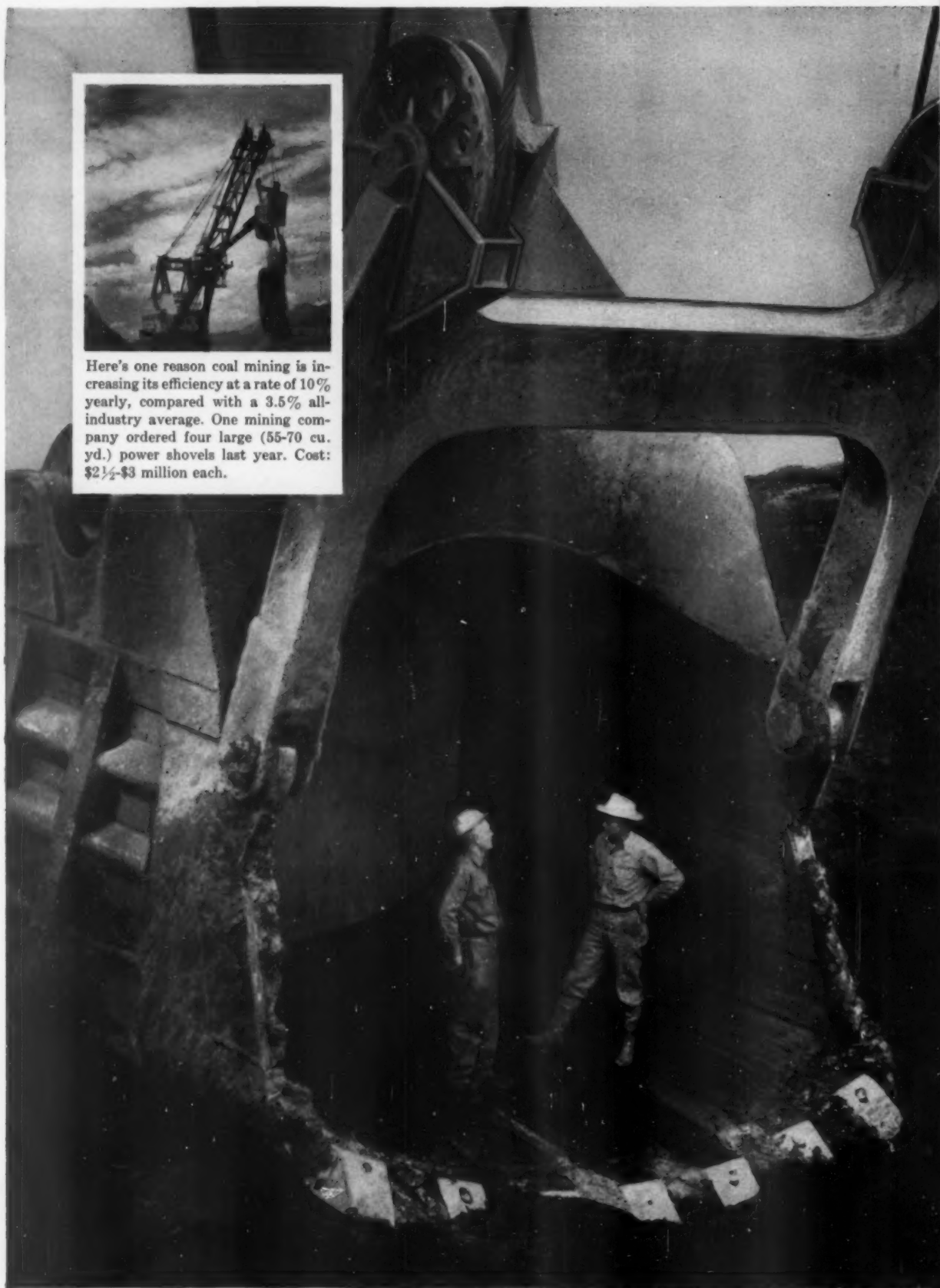


### FASTENING PROBLEM?

Whatever your business, at least one of the 800 types of Bostitch staplers can probably cut costs for you. There are 375 Bostitch Economy Men who work out of 123 U. S. and Canadian cities. One of these trained fastening experts will be glad to help you locate stapling savings. Look up Bostitch in your telephone directory, or write Bostitch, 445 Briggs Drive, East Greenwich, Rhode Island.



Here's one reason coal mining is increasing its efficiency at a rate of 10% yearly, compared with a 3.5% all-industry average. One mining company ordered four large (55-70 cu. yd.) power shovels last year. Cost: \$2½-\$3 million each.



# MINING IS BIG

*and spending steadily for expansion*

Already big, healthy and booming, mining is investing even more today to meet rising demands. Look at some typical figures:

**1.** Among 14 producers of one million or more tons of coal annually, new mines involving \$150,000,000 in capital expenditures are under development or active consideration at this moment.

**2.** During the first 9 months of 1957, new projects announced in metallic and nonmetallic mining totalled over \$1,000,000,000.

**3.** Coal mining buys an estimated 75,980,000 feet of electric wire and cable each year.

**4.** A survey of 41 coal mining companies reported 1956 purchases of conveyor belting totalling 510,337 feet—worth about \$7½ million. Over 60% of this was for new installations.

**5.** Automation is growing: a U. S. Bureau of Mines survey of 678 coal mines shows 10,325,337 gallons of hydraulic fluids consumed annually. This equals one gallon for every 28.27 tons mined.

**6.** A group of base-metal mines producing 6 million tons of ore reported the following expenditures last year: \$121,000 for pumps and pump parts; \$36,500 for circuit breakers; \$215,000 for lubricants; \$303,000 for steel pipe; \$252,000 for drills and drill bits.

Add it all up and there's just one answer: Mining, sparked by automation, is a *growing market* few companies can afford to ignore. If what you make handles or moves ores, coal or other minerals above or below ground; if it cleans, concentrates, processes, smelts or refines; if it automates, controls or saves labor on handling or processing—mining is the BIG market to investigate now. For further information on ways your company can meet this challenge, write to:

*Director of Market Research  
McGraw-Hill Mining Publications  
330 West 42nd Street, New York 36, N. Y.*

on company letterhead, requesting booklets of data on mining or coal mining; or, ask for a representative to call with this material.

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If you are considering opening an office in this operation center of the

nation's management, the officers of The Marine Midland Trust Company of New York would like to help you. Perhaps they can find the office space you need... even help with local personnel requirements.

Write The Marine Midland Trust Company of New York at 120 Broadway, New York 5, New York. They will be glad to carefully consider your problem and assemble information you may find useful.

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Growing with the state of New York  
through 160 offices in 85 communities

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of Egypt and Palestine. But the beginnings of the long, triangular conflict among Arabs, Jews, and the British in Palestine scared his partner.

Finally, Shoman decided to go it alone. In 1930—with several cousins—he incorporated the Arab Bank in Jerusalem with \$75,000 in capital. (The law required at least seven shareholders.) Only two of the 10 men on the staff had any banking experience. During the early days, Shoman went to New York for three years to make money in order to help keep the bank running. He sent his son, Abdul Majeed, now managing director (picture, page 118), to study banking at New York University and to work in the Chase National Bank (now Chase Manhattan).

• **Crisis After Crisis**—The Arab Bank's history is the survival of one political crisis after another:

• In 1935 and 1936, the Italian-Abyssinian war blew a war scare throughout the Middle East. Then, the Palestine Arabs started a nationwide general strike against the British, bringing the country's economy almost to a standstill. This brought on some panic withdrawals of funds.

• World War II started another round of withdrawals. By British law, depositors could withdraw only limited amounts over a specified period of time. Even scorning a loan offered by the British authorities, the Arab Bank went ahead and paid all demands by depositors. The bank emerged from this panic stronger than ever. Though the Middle East was a war theater, Shoman began opening branches in Damascus, Beirut, Baghdad, Cairo, and Aleppo.

• The Palestine war in 1948 between the new state of Israel and the Arab nations was the biggest blow of all to the Arab Bank. Cut off from its branches in Arab countries, the bank moved its head office under gun-fire from Jerusalem's New City to the Arab-held Old City—and then to Amman, capital of Jordan. It closed its branches in Jaffa and Haifa.

• **As Good as Its Bond**—The bank's handling of Palestine refugee depositors who fled to Arab countries—leaving money and property behind—boosted its prestige sky-high. All other banks refused to pay refugee depositors on the grounds that deposits had been frozen in Israel. The Arab Bank, with its large cash reserves (in a 50% ratio to deposits), paid out about \$12-million out of a total \$18-million deposited in its former Palestine branches.

### III. All-Arabian Bank

Actually, the trouble in Palestine turned into a boon for the bank. It stepped up the trend already established—creation of an "international" bank





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General Chair  
**\$19.95**  
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with offices throughout the Arab world.

In deposits, it is not so large as Banque Misr, S. A. E.—a Cairo-headquartered Arab bank. And many of the banks in the Middle East—some 40 in Beirut, 15 in Cairo, 10 in Baghdad, and a handful of others—are branches of huge U.S. and European banks, with vast resources.

● **Local Owners**—But the Arab Bank is the most widespread, wholly Arab bank in the region. It has a 1,250-man staff—many trained in Western Europe under a six-month program started by Shoman. The 375,000 shares are owned by Arab businessmen throughout the region. The main shareholders are the Shoman clan, with controlling interest, followed by the commercially minded Lebanese and the Arabs in oil-rich Kuwait.

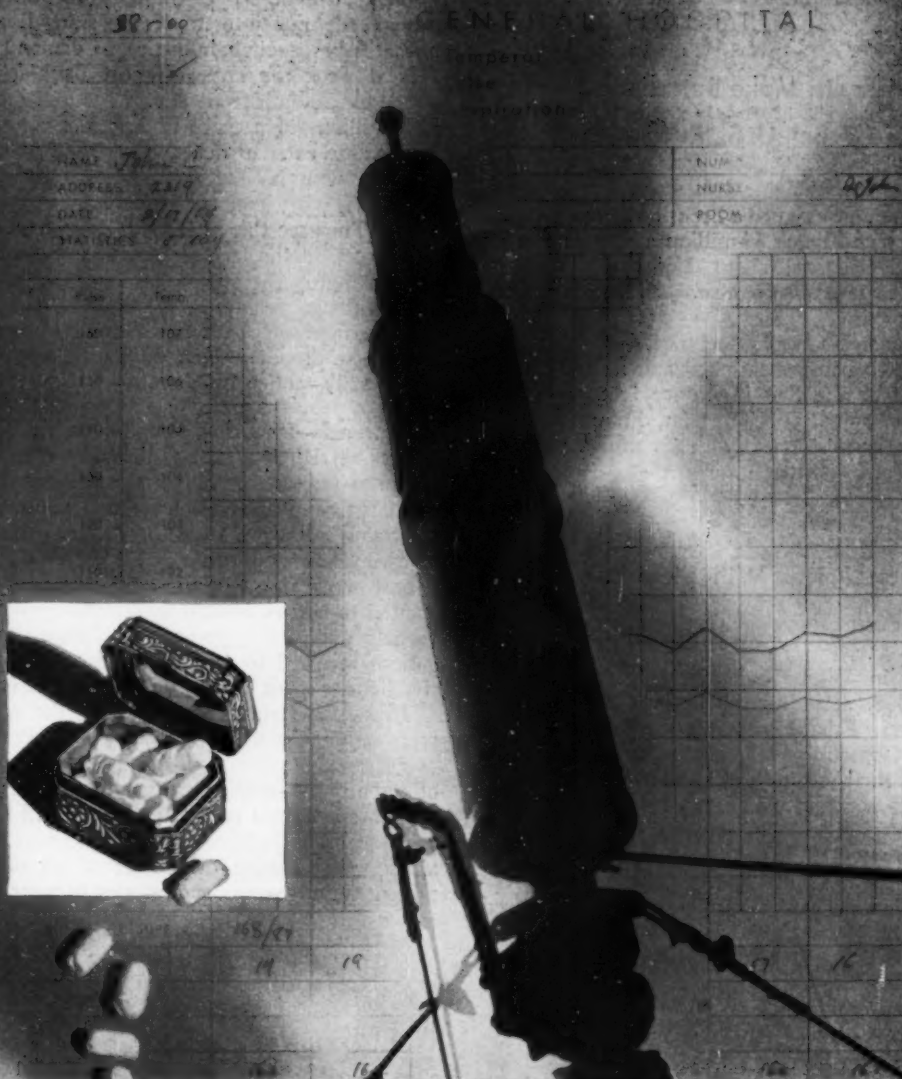
By floating shares in all Arab states—a practice started in 1943—Shoman has made his bank pan-Arabic rather than simply a Jordanian enterprise. In the past year he increased the bank's capitalization from \$6.6-million to \$9-million by putting up 100,000 shares for sale at \$45 a share. The new issue was sold in three weeks—with part of the proceeds allocated to the bank's special reserve.

● **Profit Showing**—Last year, the bank's net profit rose from around \$1-million to \$1.9-million—with \$1.2-million paid as dividends in April. The sharp increase stemmed primarily from new revenue created by the bank's steady opening of new branches. Out of \$8.3-million in gross income, 55% came from interest, 9% from foreign-exchange commissions, and about 36% from other commissions, such as handling overdrafts in Moslem cities that prohibit interest on loans.

● **The Boss**—Undisputed boss of this banking empire is 70-year-old Abdul Hameed. He gets advice from a high-powered board of directors that includes Saudi Arabia's finance minister and Emile Bustani, the well-known Lebanese businessman (BW—Sep. 29 '56, p85). But Shoman runs the show—even though he is getting on in years. A strict Moslem who doesn't drink or smoke, he keeps in such good physical shape that he can bend over, without unlocking the knees, and put the palms of his hands on the floor.

He gets along with Nasser's often emotional economic policies. Last year, when Nasser "Egyptianized" foreign banks in Cairo, the Arab Bank won exemption from the decree. Among foreign banks in the Middle East, his main competitors are the British Bank of the Middle East and the Ottoman Bank. But through personal visits year-round, Shoman keeps his own branch banks humming. This week, in typical fashion, he is off to Beirut and Cairo to check on clients and new business possibilities. **END**

\*All prices shown are for Du Pont Fabrilite upholstery. Other fabrics slightly higher. Zone 2: Texas and 11 western states.



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# In Business Abroad

. . .

## French Company to Make Butadiene Products Under License From U.S. Rubber

U.S. Rubber Co. and Ugine S.A., large French chemicals manufacturer, have signed a licensing agreement that is expected to save France \$4-million a year in foreign exchange. Under the agreement, Ugine gets exclusive rights in France to make special rubbers, latex, and plastics from butadiene.

U.S. Rubber will supply technical assistance and knowhow in setting up a new plant and its equipment. The plant will be the first in France to manufacture synthetics from butadiene. Thus far, France has had to import large quantities of synthetic rubber products from the U.S. and Canada.

. . .

## West German Prices Will Stay Put This Year, Economics Chief Predicts

Price levels in West Germany will remain stable throughout 1958, according to Ludwig Erhard, Economics Minister. Erhard bases his prediction on sales made at West Germany's big industrial fair at Hannover. Nearly 70% of the goods on exhibit at the fair are being offered at prices identical with last year.

Meanwhile West Germany has begun to feel the pinch of declining exports. Because of shrinkage of its U.S. market, Ernest Leitz GmbH, of Wetzlar, maker of optical and precision-mechanical equipment, has announced that it will lay off 500 workers.

. . .

## Colombia, Venezuela Woo U.S. Aid In Seeking to Undo Dictators' Damage

On the last lap of his Latin American tour, Vice-Pres. Nixon (page 131) this week visited two countries—Colombia and Venezuela—that are openly looking for U.S. financial help:

In Colombia, Alberto Lleras Camargo—the newly elected president who takes office in August—faces a host of economic troubles. The main one is the dollar shortage caused by slumping coffee sales and prices. Because of poor coffee earnings, the country already has virtually suspended imports. And the peso is falling.

Basically, the Colombian economy has been overextended since the coffee boom of the early 1950s. It became adjusted to high dollar earnings, launched ambitious development projects. Under dictator Rojas Pinilla, the country continued to spend freely—with financial corruption in high government circles. And in the last days of the dictatorship in early 1957, there was a flight of Colombian capital to the U.S. and Western Europe.

Now the country is trying to cut back development

projects—but there's a limit to this, considering that some projects are in an advanced stage. In addition, the government cannot reduce military spending much—the army needs money to stop coffee smuggling by bandits, and still has enough influence to demand big outlays.

Next week the Export-Import Bank is expected to come to Colombia's rescue. It is putting together a \$100-million aid package to help the country refinance its piled-up external debts.

But Colombia—like Brazil—is also badgering Washington to participate in an international coffee agreement. They see this as the way to prop up coffee sales and prices, in the face of present overproduction.

Washington is ready to talk over the coffee problem. But until this past week, it has been dead set against a full-scale agreement. On his return, Nixon may have some new proposals in hand for helping Colombia's—and Brazil's—coffee problem.

Venezuela—far richer than Colombia because of its oil—is nevertheless going through somewhat similar troubles. Because of voluntary import restrictions in the U.S., the country has been selling less oil. Beyond that, it's trying to recover from the financial mismanagement of dictator Perez Jimenez.

Last week the Venezuelan government indicated it wanted to borrow around \$200-million from U.S. banks to help stretch out payments on huge short-term obligations incurred by Perez Jimenez. During his regime, the dictator spent lavishly on large public works projects.

This week Caracas was debating the whole issue of repayment of these debts, which at Perez Jimenez's overthrow amounted to around \$1.4-billion. In a wave of resentment—focused against the former government—businessmen and politicians have called for an investigation of fraud and corruption in construction contracts, along with detailed disclosures of all obligations the present junta government intends to meet.

. . .

## U.S. Companies Drawn by India's Shift In Policy Favoring Foreign Capital

The Indian government has begun to shift emphasis in its economic planning from public ownership to private enterprise, in order to attract more foreign private investment. The modification of India's heretofore sacrosanct investment ratio—51 to 49 in favor of Indian over foreign capital—is one sign of the changed emphasis. And Indian leaders in public statements have shown a friendlier attitude toward private investment, partly because of the difficulties in financing the second Five-Year Plan—with these results:

Merck Sharp & Dohme International Div. has agreed to participate in a \$3.2-million streptomycin plant with government-controlled Hindustan Antibiotics Ltd. The plant is to be built near Bombay.

International Finance Corp. is reportedly near to completing negotiations with British-owned Balmer Laurie, Ltd., of Calcutta, whereby IFC will finance a \$10-million pulp plant in Assam state.

Kaiser Engineers and Birla Bros. of India have reached advanced stages of study on a \$31-million aluminum plant designed to produce 20,000 tons annually. The plant is slated to go up near Bombay.



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Our progress is paced by such dynamic research because our growth results from helping all industry grow and all America benefit. May we help your company develop new products through *Living Minerals*?

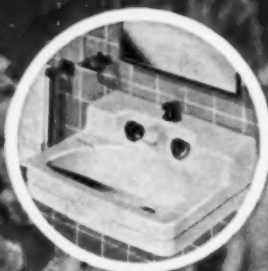


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# INTERNATIONAL OUTLOOK

BUSINESS WEEK

MAY 17, 1958



The fight in Congress over the Reciprocal Trade bill took a new turn this week. Liberal traders in Congress failed to sell the Administration on their plan for a one-year extension of the present Trade Act. This compromise would have left settlement of the basic conflict until next year.

At midweek the House Ways & Means Committee was working on a new compromise. The committee was trying to put together a three-year extension bill—one that would include some concessions to the protectionists. For example, the committee voted to give domestic industries more leeway in asking the Office of Defense Mobilization for import restrictions on grounds of national security. In addition, Congress might be given a say each time the President makes a decision on recommendations given him by the Tariff Commission under the escape clause.

Liberal traders in the House don't like this new turn in affairs. They even have some hope of still selling the idea of a one-year postponement. But failing White House backing for this, they are willing to accept some protectionist amendments in a three-year extension bill. This way, they think they can prevent domestic producers of nonferrous metals and oil from writing specific import quotas into the law.

There is still a chance that the Trade Act will not be extended at all. This could happen if either the House or Senate refuses a compromise bill. Or, if the protectionists write too many restrictions into the bill, there might be a White House veto.

—•—

The Congressional fight over foreign aid may grow hotter because of new troubles in Latin America, North Africa, and the Middle East (page 38).

True, the authorizing legislation passed the House this week with only minor cuts. But both supporters and opponents of the foreign aid measure will harden their positions as the time comes for actual appropriations.

Then, there is the effect the recession is having on Congress. This has increased opposition to aid, especially from congressmen whose districts are suffering from unemployment. Still, backers of the aid program have some new ammunition to use against the recession argument. According to a study published this week by the National Planning Assn., foreign aid spending has stabilized employment during the recession. Aid expenditures created 715,000 jobs last year (directly and indirectly), says the NPA.

—•—

Soviet foreign policy has been hardening for some weeks now. The new line shows up in at least two ways:

- Communist instigation of the anti-Nixon riots in Venezuela and of the insurrection against the pro-Western government in Lebanon. There is no doubt that these are part of a concerted plan to weaken the U. S.

- The Moscow-Peking attack on Yugoslavia's Tito. The break with Belgrade, which includes an end to Soviet economic aid, looks as sharp as Stalin's in 1948-49. It certainly destroys one of the main pillars of the peaceful coexistence policy launched some two years ago by Soviet Premier Khrushchev. Even Indian Prime Minister Nehru has now soured on the coexistence line.

The new Soviet policy seems designed to force Washington's hand on a summit meeting. Some Western observers think the Kremlin may be building up to a war scare—an atmosphere like that of Munich in 1938.

# INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK

MAY 17, 1958

According to these observers, the Kremlin has been operating since last fall on the assumption that Soviet missile advances had changed the world balance of power. Thus, the West would have to go meekly to the summit and make all the concessions there. Now that the West has refused this kind of summit affair, the Kremlin has decided to get tough—see if that will change our attitude.

—●—

While Moscow is pushing the West with one hand, it is holding out some interesting trade offers with the other. These offers suggest that a big consumer goods drive has started in the U.S.S.R.

Russian traders are now shopping in the West for industrial plants—mostly for consumer goods production. Recently, Khrushchev said that Moscow would spend \$100-million right away on chemical and synthetic fiber plants.

It is now clear that Russian buyers have been interested for more than a year in machinery and processes for producing consumer goods.

In Western Europe, the Russians started with synthetic fibers. They talked with Britain's Imperial Chemical Industries about a license for Terylene (our Dacron). They had nearly closed a deal when the Hungarian revolution interfered with the talks. Later, the West Germans licensed their fiber, Perlon, to the Russians.

From Soviet inquiries in Western Europe it is clear that textiles, plastics, pharmaceuticals, and various domestic appliances figure in the Soviet expansion plans.

—●—

There is still no settlement of the wage dispute faced by Britain's nationalized railways.

Apparently the Macmillan government is ready to yield a little ground to avoid a strike. There is talk in London of a 2% wage increase, or half the cost-of-living increase during the past year. The rail unions might accept that if they also get a promise of a wage review later in the year. But the outcome may not be known for some weeks. And a rail strike still is possible.

Meanwhile the British government is refusing to ease its credit squeeze and so give the signal for a general business expansion. That will come only after the wage issue has been settled one way or another.

—●—

The British soon will be building Japan's first large atomic power plant. It is to be a \$50-million, 150,000-kw. station in the Tokyo area. Japan is deciding this month which British company is to get the construction contract.

From the start, Britain has had the inside track on the Japanese atomic power contract. Early in the game the British sold Tokyo on the British type reactor, which uses natural uranium fuel. In turning down U. S. reactors that use enriched fuel, the Japanese argued that they can always count on supplies of natural uranium.

Meanwhile in Italy, nine American, British, and French companies are bidding on another 150,000-kw. atomic power plant—the first big one in Western Europe. This is to be partly financed by the World Bank.



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# Mahomet Goes to the Mountain

● NLRB will migrate to Detroit for quick hearings on pleas of skilled crafts to shake loose from UAW.

● For once, the auto companies and Reuther make common cause against the would-be splinter units.

● For UAW, it's a double switch, for victory would damage its avowed aim of dragging out contract talks with the industry until fall.

The National Labor Relations Board will make an unprecedented trip to Detroit next week to hold a two-day hearing on petitions of skilled workers to separate from the United Auto Workers. When it does, the UAW will find itself in the unusual position of:

- Taking sides with the auto companies in a labor dispute.
- Arguing for an NLRB decision that would remove a bar against early settlement of present auto contract negotiations although the avowed intention of the union is to drag out those negotiations until early fall.

The Big Three find themselves in a similar, if less complicated, dilemma. Historically, the auto companies were able to resist union recognition as long as they dealt with numerous splinter groups of craft and production workers. It was the "solidarity" of the United Auto Workers in the late 1930s that finally put the companies in the position of having to bargain and to grant more and more concessions through the years.

Even so, the companies are arguing, alongside the UAW, that they would rather deal with one bargaining agent than many, and that skilled tradesmen should not be separately recognized where they are presently represented by Walter Reuther.

Back of this situation of strange bedfellows and distorted strategy are the 94 petitions for separate recognition that skilled tradesmen have dropped in NLRB's lap since Mar. 1. Of these, 60 deal with groups of General Motors workers, 21 with Chrysler workers, and 13 with Ford employees. The NLRB regional office dismissed the 34 Chrysler and Ford petitions this midweek on technical grounds. An appeal is likely.

Narrowing the coming hearings to GM cases sharpens the issue: whether the so-called National Tube Doctrine is to be applied to the auto industry.

The National Tube Doctrine, or "steel case" as it is sometimes called, was a ruling by the board seven years

ago, growing out of petitions by bricklayers for separate recognition from the United Steelworkers. The ruling was that skilled workers in basic steel, aluminum, lumber, and wet-milling could not separate from industrial unions already recognized.

In petitions filed Apr. 15 and 16, the United Auto Workers asked that this doctrine of "no severance" be extended to make the auto industry a fifth "basic" industry.

Some union publications had predicted the companies would welcome skilled trade bargaining agents with open arms, but Ford on Apr. 29 and Chrysler on May 5 filed motions asking NLRB to dismiss petitions by unions seeking to represent only skilled workers. GM took a different approach. It joined UAW in asking for an extension of the National Tube Doctrine.

The UAW has been having trouble with skilled workers in its membership since the 1955 settlements, when supplementary unemployment benefits—of little value to skilled workers who are rarely laid off—were obtained in lieu of additional straight wage increases. Recognizing this, Reuther later made overtures to the skilled by offering:

- Representation on each top-level bargaining committee.
- An entirely separate skilled trades contract supplementary to the main contract to be obtained from companies in future negotiations.
- The privilege of voting separately on their part of the contract.

All this, plus a notable amount of attention in union publications and conventions, apparently hasn't been enough to keep the skilled trades entirely in the fold.

This spring, the International Society of Skilled Trades, as well as the American Federation of Skilled Crafts, the Society of Tool & Die Craftsmen, the Pattern Makers League of America, and the International Union of Operating Engineers have been organizing skilled tradesmen right out from

under UAW. These are the unions that have submitted the nearly 100 petitions for separate recognition.

Actually, there appears to be more to the splintering of skilled tradesmen than mere feelings on their part that UAW hasn't been heeding their demands enough, or that they are an elite group whose snob appeal justifies separate recognition. Union politics are also involved. Insiders report that many of the rebels who are organizing skilled tradesmen are old-time enemies of Solidarity House within the UAW. Some UAW stalwarts also express belief that union enemies on the outside are encouraging skilled tradesmen to separate—as a means of crippling the long-powerful UAW and harassing Reuther at his weakest bargaining time in many years.

Ford and Chrysler opposed the petitions of the skilled tradesmen on the basis of previous NLRB rulings that:

- It is improper to sever skilled trades employees from an existing production and maintenance bargaining unit.

• It is improper to seek to represent a skilled trades group in one plant or a few plants of a multi-plant bargaining unit without seeking at the same time to represent employees in skilled classifications at all other plants in the unit. The regional NLRB director based his dismissal of the Ford and Chrysler cases on this argument raised by the two companies.

But there's more to the companies' opposition than the legal points. In the first place, recognition of a multiplicity of bargaining units could throw already vastly complicated and expensive negotiations into real chaos.

But more immediate is the problem of present negotiations with UAW on contracts expiring the end of this month. If there is any question about UAW's right to bargain for all the employees it claims to represent, no settlement could be reached until such a determination is made.

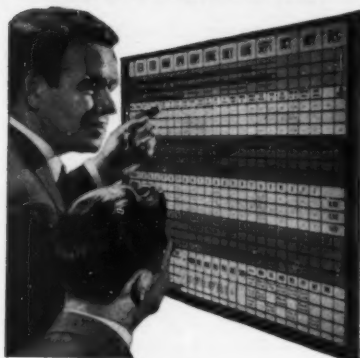
If the NLRB decided to hold hearings on all the petitions before them, even in groups by union or by company, the hearings could last at least until October, according to an NLRB spokesman.

That's why the entire board will leave Washington to hold mass hearings on the UAW motion to extend the National Tube Doctrine, and why the board will probably make a rather far-reaching decision before the end of this month.

After hearing arguments by the



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UAW, craft unions, auto companies, and outside observers such as the AFL-CIO and the National Assn. of Manufacturers, NLRB will have a choice of:

- Granting the Auto Workers' motion to extend the National Tube Doctrine in toto.
- Upholding dismissal of petitions from some of the skilled trades unions which the NLRB believes do not truly represent well-defined crafts.
- Granting further hearings on some or all of the petitions.
- Dismissing some or all of the petitions without ruling at all on the extension of the National Tube Doctrine.

Considering that NLRB is going to Detroit mainly to clear the air for a settlement of present UAW-company contract negotiations, the first or fourth choices appear the most likely.

## Rubber Union Rejects Pay Rise Moratorium

Employers in a second major industry this week urged labor to consider a one-year moratorium on wage increases. As in the first—steel—the answer by its union was a flat refusal.

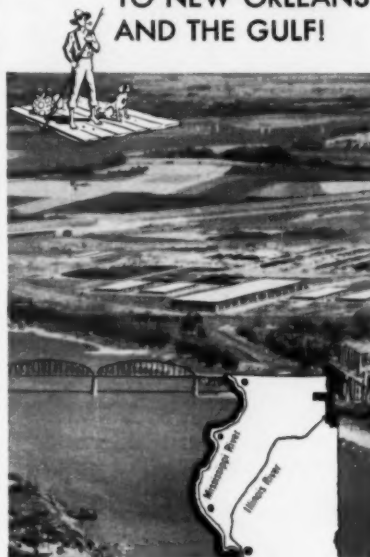
Rubber's Big Four sent identical letters to the United Rubber Workers asking its leaders to postpone negotiations for higher pay and cost-boosting fringe concessions until April, 1959. The companies, among the hardest hit by the recession, said a moratorium is essential to both the immediate and long-term welfare of the company and its employees—and to the economy.

URW's international policy committee, meeting in Cincinnati, rejected the appeal. It said that union negotiators will ask for "substantial and adequate wage increases" and fringe gains when bargaining gets under way next month. One fringe goal is a hike in supplementary unemployment benefits to assure workers 100% of weekly pay in layoffs instead of the present 65%.

Earlier, a number of smaller steel companies similarly appealed to the United Steelworkers to forego wage and fringe increases due this July 1 under long-term contracts. The costly total, estimated between 16.9¢ and 19.1¢ an hour, could lead to steel price increases. To avert this, the companies proposed a wage-price freeze for a year. The union said it would not give up gains due under contracts negotiated in 1956, and added this week that it sees no justification for "inflationary steel price increases," despite the industry's low operating rate and the drop in profits shown in first-quarter financial statements. **END**

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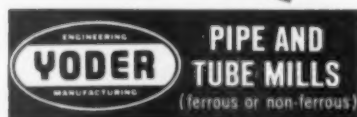


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# Narrowing No-Man's Land

**Taft-Hartley amendments urged to help those unions and employers who fall between the two stools of federal and state law, getting protection from neither.**

The no-man's land in labor disputes—the unpoliced territory between federal and state jurisdiction—may be narrowed soon.

Concern has been growing over the plight of employers and workers whose disputes are turned down by the National Labor Relations Board but who, because they are involved in interstate commerce, are barred by federal law from relief in state agencies. The McClellan committee criticized this situation as one that has made possible "exploitation of many workers and circumvention of legitimate labor organizations" (BW—Mar.29'58,p108).

• **The Area**—Estimates of the number caught in the area between federal and state jurisdictions vary widely. Unions say "tens of thousands" of workers lack the protection of any labor law. Others put the group at a smaller figure. But, all agree that hardships exist.

Under the Taft-Hartley Act, all employers involved—even remotely—in interstate commerce come under the jurisdiction of the National Labor Relations Board. However, NLRB policy since 1953 bars consideration of many cases under a "de minimis" rule. To hold down on its already overloaded docket, the board rejects cases involving employers whose business is not considered large and consequential enough to warrant NLRB's attention. Estimates of cases rejected under this board policy run as high as 25%, a figure Republican senators challenge.

• **Ceding Cases**—The U.S. Supreme Court held in 1957 that state labor agencies cannot act in the rejected cases because, under T-H, the federal board has jurisdiction over all interstate commerce cases. In its Guss decision last year, the court ruled that NLRB can cede cases, under T-H, only to states that have a labor law just like the Taft-Hartley Act. Otherwise, it held, state laws can't be applied to those in interstate business.

So, in this area, NLRB won't handle labor-management disputes that normally come under labor law—and state boards can't. Unfair labor practices can go unchecked. There is no legal body to poll workers in representation contests. Questions of legal rights go unresolved; the strongest side wins.

In addition to employers eliminated from NLRB coverage by the board's "de minimis" rule, entire industries aren't covered. For instance, neither the taxicab industry nor the hotel industry

is under NLRB controls. Although both are considered predominantly intrastate, they are sufficiently involved in interstate operations—taxis because they service airports and railroad stations, hotels because they accommodate guests from across state lines—so state agencies can't touch their labor disputes. NLRB won't.

• **Up in Congress**—This week, the Senate labor subcommittee headed by Sen. John F. Kennedy (D-Mass.) put aside anti-corruption amendments to the Taft-Hartley Act long enough to consider what should—and can—be done about the no-man's land in labor disputes. There were a number of ideas to mull over:

• **NLRB proposes** to revise its jurisdictional standards so that it can move further into the in-between area. Board members set the standards arbitrarily. They are now willing to lower the minimum requirements to get a case before the board—by reducing the amount of interstate business a concern must handle to bring it under NLRB coverage. But, NLRB makes clear that if it is to deal with more cases, it must have more money.

• **A number of bills** before Congress would authorize state agencies to take over any case rejected by NLRB, regardless of its interstate commerce status. The Administration is for such a remedy and so are most management groups. The latter contend that businesses too small to be handled by NLRB are important in their home states and communities.

• **Despite labor's criticism** of NLRB, it would rather have the federal board handle a case than almost any state agency. So, labor is backing NLRB's plea for more money and any other move to give the board as much interstate business as it can possibly handle. The unions contend that there are 36 states with no labor laws, and only four—Connecticut, Rhode Island, Massachusetts, and New York—with laws that, by union standards, are preferred to T-H.

It might seem a paradox for the Eisenhower Administration to propose, in its Taft-Hartley amendments, that cases declined by NLRB be ceded to the states while, at the same time, NLRB is lowering its jurisdictional standards. But, the hope is that if Congress sees the board taking on more of the smaller and medium-sized disputes, then Congress might be more



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apt to turn over the remainder to the individual states.

• **Dissenter**—NLRB has been under pressure for some time to change its standards. When Congress didn't act last session, in response to the Supreme Court's advice that the disputes issue be clarified by law, a board member,

Joseph A. Jenkins, decided NLRB should cease to limit its jurisdiction. He has dissented in several decisions.

The board members are also getting some pressure from the state labor boards. The New York state board has asked NLRB to cede to it jurisdiction over the taxicab industry.

## Race Problems Build Up for Unions

Negroes are being fired faster than whites, and the tensions between the groups are intensifying.

The recession is intensifying race problems for unions in their dealings with their own members and with management. Negroes are losing jobs twice as fast as white workers. That's mainly because they were last hired during economic expansion and are hardest hit by the heavy layoffs. Where Negro workers have the length of service necessary to hang on to their jobs, white workers often are challenging seniority rules that keep them at work. The possibility that sub-surface tension may erupt into open violence worries many officials in industrial communities across the nation.

• **Losing Ground**—Charles Abrams, chairman of the New York State Commission Against Discrimination (SCAD), charged last week that the economic decline is wiping out many of the gains made nationally by minority groups over the past decade. Few would put it so strongly, but none dispute the figures. One out of every seven Negro workers in the nation is now unemployed, in contrast to one out of every 14 whites.

So far, discriminatory practices are not a direct issue in most discharges. The newness of Negro jobs is the big reason. The Negro did not begin to extend his position in industry until the manpower shortage of World War II and made further gains in the tight postwar labor market. So when recent layoffs reached into the 10-year to 15-year seniority group, Negro gains were wiped out in many plants.

• **Mixed Reports**—However, the number of complaints of discriminatory layoffs is rising steadily in agencies such as New York's SCAD. The percentage of complaints filed with SCAD to protest discrimination in firings rose from 13% of all complaints for 1957 to 23% for the first three months of this year.

On the other hand, the Jewish Labor Committee, an organization that keeps close tabs on race problems within unions, notes no marked increase in complaints of discrimination. So far, it reports "little resentment" among Negroes.

• **Increased Competition**—But, says JLC's executive director, Emanuel

Muravchik, "We have had reports of resentment among white members against the unions for protecting the seniority rights of Negro members." This is particularly noticeable in those areas where Negroes are holding an appreciable number of jobs in industry for the first time. Job competition between white workers and Negroes has increased, leading to "new tension."

This tension is further complicated by labor's "mixed" civil rights record. "We are filled with dismay at the lack of enforcement" of civil rights provisions in the AFL-CIO constitution, Herbert Hill, labor secretary of the National Assn. for the Advancement of Colored People, said this week at the United Furniture Workers convention.

Negro union members, intent upon preserving and extending the rights they have won, have some unexpected leverage. "It is no accident," Hill said, "that newspapers in Ohio have cited the discriminatory practices of some building trades unions in urging that Negro workers support 'Right to Work' proposals."

Although NAACP and other Negro spokesmen are opposed to "Right to Work" legislation, the implied threat that the Negro worker might support the ban on the union shop has some trade union officials worried.

• **Four Causes**—According to SCAD, the higher unemployment levels among nonwhites are due to:

• Concentration of urban nonwhites in the wage-earning group, which suffers from more unemployment than the salaried group.

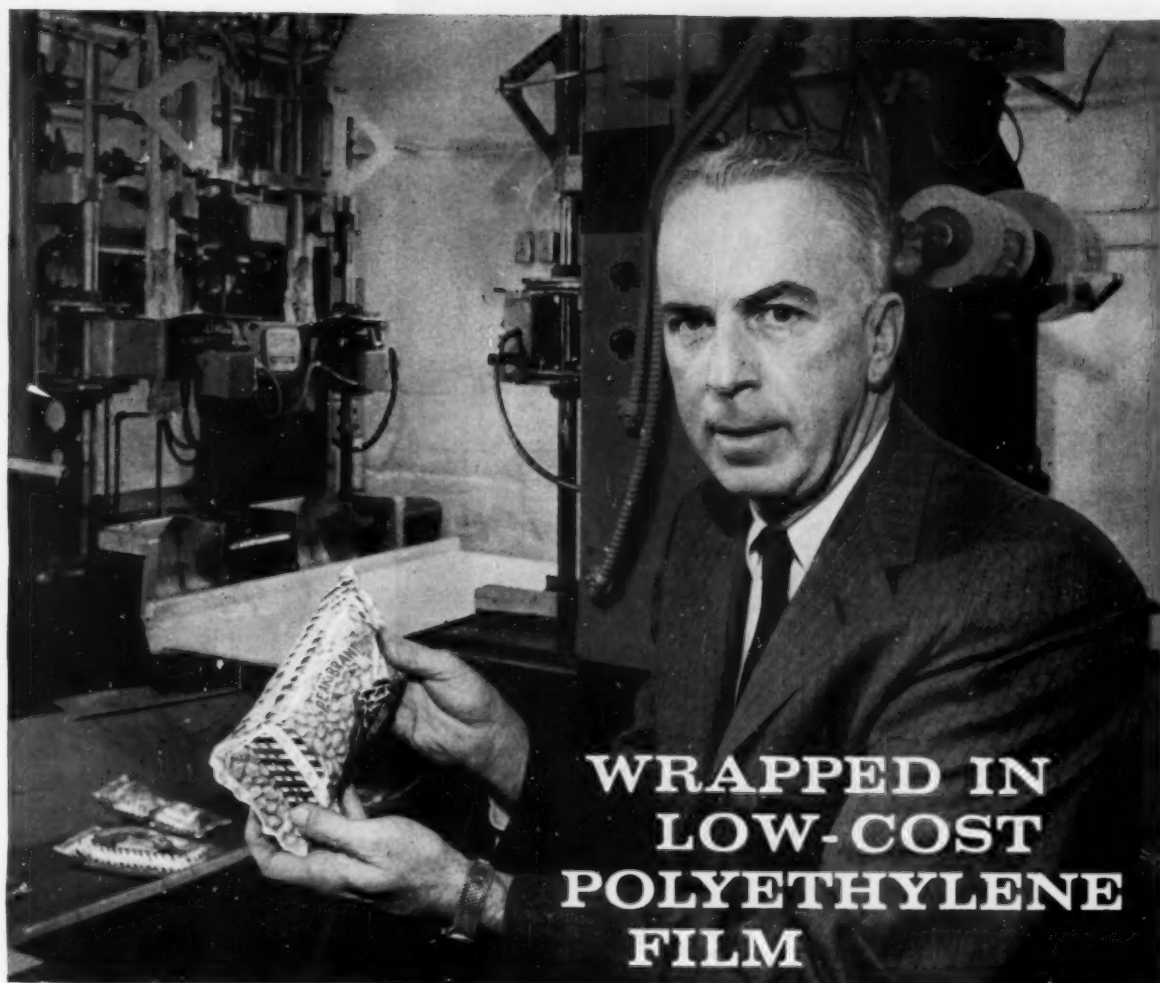
• Concentration of nonwhites in unorganized industries where seniority is not necessarily followed in firing.

• Low seniority of many nonwhites in organized industries.

• Poorer education and training of nonwhites, giving them a poorer choice of jobs at all times.

Some of these causes of the present unemployment pattern are rooted in older patterns of discrimination and exclusion. "What we have now," says one race relations expert, "is a hang-over from past practices. And, hang-overs can be painful." **END**





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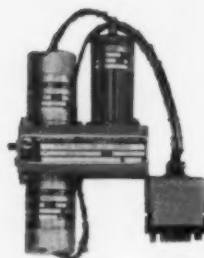
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# In Labor

• • •

## Canadian Labor Chiefs Stir Up Talk of New Political Party

A new Labor Party may be in the making in Canada if the Canadian Labor Congress has its way. Delegates voted to create a new political party, to include adherents of the Socialist Cooperative Commonwealth Federation, farm and professional groups, and members of the Liberal Party, which was badly defeated at the last Canadian election.

The unions are banking on a reaction against the present massive Conservative majority in Parliament, especially if the Canadian recession deepens. This reaction, unions believe, may cause voters to demand something more radical than old Liberal Party policies.

• • •

## Union Waives Automatic Wage Boost So Employer Can Compete with Kohler

United Auto Workers Local 1276 this week passed up an automatic wage increase of 6¢ an hour at Universal-Rundle Corp., a recession-pinched plumbing fixtures manufacturer in Milwaukee, Wis. But the action is not likely to establish a collective bargaining pattern.

The union acted, in part, to bolster U-R's competitive position against that of another Wisconsin maker of plumbing ware—Kohler Co. The UAW has waged a four-year strike and boycott against Kohler (BW—Apr. 5'58,p121). It plans a drive to boost U-R sales, which are off 10% to 15% from last year, according to the company. The company had also asked the union to consider reducing its wage rates—among the highest in the industry—but the workers refused.

The union will review the situation at Universal-Rundle's Milwaukee works on July 31 and, if it hasn't improved, will ask for another review next Jan. 31. If the union finds that the company's position has improved, it will ask that the wage hike be made retroactive to May 9, when the original increase was due.

• • •

## Wage Settlements in Aircraft Plants Avert Threat of Major Walkout in Industry

The bulk of the aircraft industry reached at least tentative agreements with the Machinists and Auto Workers on new contracts this week, with local unions taking the initiative. Although stoppages on local issues occurred in Marietta, Ga., and Pomona, Calif., the danger of a crippling tie-up in the industry appeared over.

Lockheed Aircraft Co. and its Machinists local settled only hours before a strike deadline last week. Terms include wage and fringe increases of 18¢ to 30¢ an hour

in the first year of a two-year pact, a further 7¢ or 3% (whichever is greater) in 1959. If mid-July living costs are up substantially, a cost-of-living increase will be paid in September.

Other companies did not come around to the Lockheed settlement terms quickly or exactly, but tentative agreements close to that of Lockheed were reported for North American, Douglas, and Convair plants.

• • •

## Canadian Rail Strike Ends With Plan For Gradual Removal of Diesel Firemen

A three-day strike by the Brotherhood of Locomotive Firemen & Enginemen against the Canadian Pacific Ry. ended at midweek in an agreement on gradual removal of firemen from yard and freight diesel engines.

The CPR will not hire any more firemen for diesels. Promotions, retirements, and deaths are expected to eliminate all firemen on yard and freight diesel service with a minimum of hardship within 15 to 17 years. Railroads in this country are now expected to ask the BLF&E for a similar plan to reduce diesel crews.

• • •

## After Fight, Ohio Leaders Vote AFL-CIO Merger on State Level

Ohio unionists last week ratified the merger of the Ohio State Federation of Labor and Congress of Industrial Organization—but not without a fight, especially among AFL delegates.

The Ohio merger, it is expected, will be followed shortly by mergers in Indiana, New York, Massachusetts, and others of the dozen industrial states where similar squabbles among leaders have held up merger moves despite pressures from AFL-CIO.

• • •

## Countercharges Denied, Both Sides In Montgomery Ward Case Will Appeal

Countercharges of unfair labor practices by Montgomery Ward & Co. and Retail Clerks International Assn. were dismissed for "lack of evidence" last week by the National Labor Relations Board's Chicago regional director, Ross M. Madden. Both sides said they will appeal Madden's decision to the board.

The union, which has conducted an ineffective "piece-meal" strike against Montgomery Ward since Jan. 6, accused the company of refusing to bargain and to give the union information about its health-welfare plan and some wage rates.

Ward charged that the union has not bargained in good faith and that it is demanding uniform national wage and contract provisions, although contracts for years have been on a local basis. The company also complained that the union is picketing at some stores where it is not a bargaining agent and at others where there isn't even a union.

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## THE MARKETS

*"We can pick and choose much more safely now. What we're looking for are small but established growth companies strapped for money."*

—head of a New York investment syndicate

*"If a large situation were to come up where additional capital besides our own would be necessary, we would have a hard time finding partners at this time."*

—president of a closed-end trust

*"We're no longer interested in the brand-new company. What we're looking for is a vehicle in a growth industry. And we've never turned down a deal because it was too big."*

—top venture capital firm

*"Stay away from the fads if you want to make money."*

—investment counselor

*"The trick is to specialize. We've been burned on a number of things outside our orbit, so now we're just sticking to things we know—oils and broadcasting."*

—small risk capital house

## Risk Capital Plays It Safer

The quotations above cover a considerable range of investment interest and investor points of view—and that very fact makes them typical of the diverse nature and ill-defined boundaries of the venture capital business, that hybrid form of smart money that sprang up in the immediate postwar years.

But there's a common attitude running through all the quotations, too—and it reflects the changes that are now coming to the venture capital business. It is the attitude of chastened professional investors who have sometimes come a bit too close to the reefs in their venturings in the past, and as a result are now steering a more prudent investment course.

• **Small but Influential**—The actual volume of venture—or risk—capital put into U.S. business by individuals, venture capital firms, and investment banking houses is relatively unimpressive when you stack it up alongside the huge total of corporate debt and equity capital. But its impact is mighty in investment circles. For despite some flops, the venture capital firms have been returning

handsome profits, and attracting eager attention.

The funds that venture capital firms invest are looked upon as sophisticated money. Most of the people who put their funds to work in this manner are successful investors in their own right—and are willing to take calculated risks. Their cash is usually funneled into little-known companies that could provide big returns in the future. So what they do is closely eyed by investors, eager to see where sophisticated money—and sophisticated money management—is headed.

By providing money, and often management, for small and relatively untried companies, venture capital fills an important gap. Small businesses have been lamenting the dearth of risk capital for years, and many of them would never get off the ground if it weren't for the venture funds' assistance.

Venture capital has also had a hand in developing previously uncharted areas—such as electronics—that have become big and growing industries. Some risk-takers point to the satisfaction that

comes from such financial pioneering as an important part of their reward—but the monetary returns have been far from negligible.

• **Recession Shifts**—The recession, however, has speeded up some changes that were already under way in the venture capital field. There's still plenty of pioneering, but there has also been a shift of emphasis—mainly a shift away from brand-new outfits to small but established companies in growth areas.

Right now, venture money is headed mainly for the instrumentation field—in the oil, gas, electronics, or chemical industries. But there are still rich opportunities, say most risk-takers, in such things as pipeline construction and operation, radiation, nuclear energy, broadcasting, special film processes.

As a sample of what's going on, here are the situations into which J. H. Whitney & Co., one of the top venture capital firms, has recently put its money:

• **Summers & Mills, Inc.**, a Dallas electronics team just getting started in instrumentation for the oil and gas industries.

• **Milton Roy Co.**, a small Philadelphia company (sales in 1957: about \$4-million), which is in the proportioning pump field—pumps that deliver controlled volumes of various chemicals to liquid streams in chemical plants.

• **Foundry Services, Inc.** of Columbus, producer of metallurgical chemicals used in the alloy steel industry.

• **Venturing With Care**—Whitney did a lot of investigating before placing these bets. Like most capital venture firms, it is not putting its money to work without a great deal of thought. In the boom, there were some signs of a devil-may-care attitude on the part of many risk capital houses. But now, even though small business is still pressing its demand for capital, venture capital firms—partly for internal reasons—have tucked in their horns.

The experience of the past 10 years is partially responsible. Many risk capital outfits have discovered that risk-taking can be even riskier than they thought. A number of them have folded completely, and others show plenty of red ink on their books. In fact, a number of individual investors in such ventures ruefully admit that they would have done just as well investing in listed common stocks.

• **Nothing Brand-New**—Of those outfits still going strong, most are reluctant now to buy into a very small new company. Most of the big venture funds in fact have withdrawn almost completely from financing of brand-new companies because of the heavy losses suffered in such investments.

Nathan R. Owen, a partner in J. H.

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## "... wary of investment fads, venture capital firms learned to specialize..."

STORY starts on p. 143

Whitney & Co., explains the shift: "The whole concept of venture capital has changed for us. We're no longer interested in the brand-new company, but we're looking first for a growth industry and then picking a vehicle within that area."

Owen goes on to say that Whitney now prefers to get into a project only after it has been in operation for a time. "We want to see how its management operates," says Owen, "to find out if it will be able to handle the growth that we expect from the company."

• **Pooling the Risk**—It's also becoming common for both small venturers and big firms to pool talent and cash, and form syndicates. They've come to feel that this will spread the risk. One counselor warns, however, that "it's usually wise for one person or company to take the lead." Some syndicates have cropped up, also, because individual firms have got down near the bottom of their available supply of cash, and have needed partners for some beckoning venture.

• **No More Fads**—The big firms also have learned to stay away from the investment fads. At one time or another in the postwar period electronics, chemicals, plastics, oil exploration, and uranium mining all have had their waves of popularity. But fashion changes in risks as well as in dresses, and venture firms now shy away from fads that lose their hold.

Shopping centers, a big favorite a few years ago, are no longer wanted by many venture firms. Plastics fell out of favor two years ago, says one investment counselor. Uranium mining has lost its old luster, too.

Wary of such fads, a number of firms have learned to specialize. Laurance Rockefeller, for example, leans toward aviation undertakings. Many of his bets have paid off, including his big investment in Marquardt Aircraft Co.

• **Small Business' Need**—The need for risk capital has been stressed over and over again in the postwar decade. For one thing, the capital structure of small business demands it. A new Federal Reserve System study on Financing Small Business bluntly asserts the odds are stacked against the small business venture. Launching new enterprises is a long, difficult, and hazardous process; many obstacles stand in the way.

Investment bankers, for example, are reluctant to underwrite sales of securities of completely new and untried ven-

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BUSINESS WEEK • May 17, 1958

tures. (One exception is Lehman Bros., which has been very successful in sponsoring new outfits—such as Litton Industries and Hertz Corp.) And even if a security issue can be sold, the process is costly and saddles a new company with a heavy burden.

Commercial banks might extend loans—at stiff rates—but they aren't set up to provide permanent capital—and that is just what most little companies need.

Another obstacle to small company financing is that federal estate and income taxes have helped dry up sources of equity capital. Big individual entrepreneurs were the once principal providers of venture capital. Now fiduciaries and life insurance companies—which must pursue a cautious investment policy—hold much of America's savings, and risk investments are restricted.

• **Variety**—All these factors contributed to the postwar formation of the venture capital business. The field it covers can be only vaguely staked out, because the term includes a large variety of capital sources.

Among them are:

• Some closed-end trusts, such as Atlas Corp. and American Research & Development Corp., whose securities are sold on the exchanges like any other corporate stock.

• Investment banking houses, such as Lehman Bros. and Kuhn, Loeb & Co., which devote their efforts to developing "special situations."

• The venture capital firms themselves, such as those backed by Rockefeller and Whitney money, which cropped up after the war to back brand-new businesses.

• Wealthy individuals, out to chalk up capital gains. These are still the backbone of the risk capital business.

• **Many Methods**—This diversity is reflected clearly in their different approaches to risk-taking. Many individuals, seeking a big killing, defy cool calculated probability by "playing the business game." But most of the venture capital firms take a more conservative view. They have an intense desire to see a company grow, and they assist forcefully in this direction.

American Research & Development, for example, provides management consulting service (if it is asked for) to help develop the profit potential of a company. And Whitney, in its purchase of 28% of Foundry Services, sent two partners hunting for three months to find a president for the company.

Few of the big investors want management control, but most of them feel the need for some sort of ultimate or contingent control to protect their interests. Thus Frederick Trask, of Payson & Trask, went along with existing



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She was only a sow, but she helped make history by donating her ears to science. Thanks to Sukie and her kind, ADL was able to refute an old maxim, by actually making a silk purse out of sows' ears. The late Dr. Arthur D. Little wanted the purse made, not as a scientist's stunt, but as a gesture of rebellion against defeatist attitudes that were apparent in the troublous early twenties. Let us send you the entertaining story of this achievement, "On the Making of Silk Purses from Sows' Ears." It beautifully illustrates the ADL approach.



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The Markets 145



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management for two years after his firm bought Lumber Fabricators, Inc., Ft. Payne (Ala.) prefab builder. But when he felt the company wasn't living up to expectations, he stepped in himself as president. Usually, though, the procedure calls for the company to sell a major portion of its stock—anywhere from 25% to 75%—to the investing group, and a seat or two on the board of directors is made available.

• **Totting Up the Gains**—For their financial and managerial assistance, the risk-takers expect lush rewards. One closed-end trust mentions 10% after taxes as an adequate return. Another venture capital fund sets a minimum goal of a tenfold appreciation on its original investment over a period of years. Some individuals think in terms of tripling their money in a two- or three-year period.

How long they're willing to wait is another matter. Individual investors tend to consider risk-taking a one-shot affair. They sink their money into a company, anticipate a quick return. But venture capital firms have begun to see the need for follow-up funds. Even if the company is successful, it may take a considerable period for earnings to show up.

With this in mind, most big investors think that a three- to five-year period is long enough to wait. There are extremes, of course, depending on the type of situation; those based on new technologies take long to pan out.

## Postponed Tax-Exempts Flood Into Bond Market

Borrowing in the tax-exempt bond market shows no signs of letting up. But the picture may be deceptive.

In the first four months of the year, state and local governments sold \$2.9-billion in bonds, a 19% increase over the same period a year ago. If the volume of borrowing remains at the present level, the annual total would come close to \$9-billion, which would establish a new record.

But the pace is due to tail off. A good deal of this spring's borrowing represents issues that were postponed in 1956 and 1957 because of tight money. The Federal Reserve's switch to a policy of active ease brought these issues back into the market. Now the bulk has been sold, and the second half of the year should see a sharp drop in tax-exempt offerings.

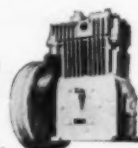
Thus, interest costs should decline farther. For despite the unusually heavy offerings, investors have been eager buyers. In April, for instance, yields fell and prices rose despite the fact that the volume was well above last year's figures. **END**

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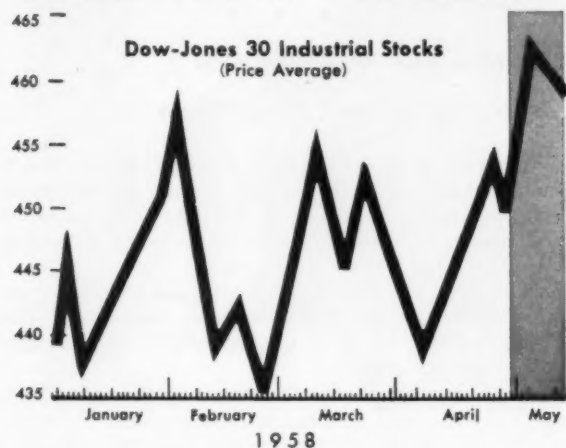
with gay-hued handles, made of a new Durez plastic that resists heat . . . brightens living . . . warms up sales, too. For the full story, Please turn to page 71.



# In the Markets

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## A New Peak . . . and a Retreat



### Stocks Touch a New 1958 Top, Then Beat a Low-Pressure Retreat

The stock market, like a man after a spree, showed definite signs of sobering up this week.

Stock prices, as measured by the Dow Jones industrials index, hit a new high for the year (chart). The index hovered around this peak for several days, but then backed off as buying strength dwindled.

But while the market moved down, it was only a mild backing away—although the drop gathered speed on Wednesday. The big question is whether the drying up of buying power will be followed by selling. The most prominent feature of the market since the turn of the year has been the marked absence of selling pressure.

It is conceivable that a wave of selling will soon begin. For one thing, the market hit its low more than six months ago, so that investors who bought at or near the bottom can now sell and take a capital gain. For another, those who purchased stocks during the bull market and held on during the dive last fall may now sell if the market shows any sign of dropping once more.

But until investors lose confidence, they will not be getting out of stocks. So far this year, confidence has remained high even though business—and profits—are falling. Some professionals think that a drop will be triggered by trouble abroad (page 38); others feel that investors may be shaken by continued reports of poor earnings.

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### S&Ls and Commercial Banks Hint Savings Will Draw Less Interest

Softness is developing in the interest rates paid to savers. Both savings and loan associations and commercial banks are talking about cutting their rates.

There will not be any across-the-board declines, but some S&Ls may reduce their dividends in the second half, and a number of commercial banks are expected to follow suit.

In contrast, the mutual savings banks are planning to hold to their present level. According to William Lyon, newly elected president of the National Assn. of Mutual Savings Banks, most mutual savings institutions will have higher earnings despite the ease in money rates.

• • •

### Government Bond Mart Takes Heart, Partly From Faith in Easier Money

Some strength returned to the government bond market this week. There was still fear that the Treasury would put out a long-term bond issue, but there was also growing conviction that the Federal Reserve would continue its policy of easing interest costs.

If the Treasury does issue a long-term, it would tend to hold back any sharp advance in prices—at least in the short-term. For a long-term would compete with other borrowings, both corporate and state and local, that have been coming into the market. The trend toward higher bond prices and lower yields would tend to slow.

But if the Treasury avoids a stretchout, then bond prices seem poised for a strong upward thrust. As Robert Van Cleave of C. F. Childs & Co. pointed out this week, "a sharp price rise might follow" a Treasury decision to sell in the short-term and intermediate area.

A renewed interest in bonds could, of course, come with a decline in the stock market. It is rare for both stocks and bonds to move together, as they have in the past few months. If there is a break in the stock market, investors will turn to bonds. There was increasing evidence this week that such a trend was in the making.

• • •

### The Markets Briefs

There's no silver lining ahead for the railroads this year. The Pennsylvania RR announced it had scant hopes of making a profit in 1958 and refused to speculate on when it would resume dividend payments. Similarly, Delaware & Hudson and St. Louis-San Francisco reported their prospects depended on a general upturn in business. Missouri Pacific and Kansas City Southern expect to wind up in the black, but with earnings well under the 1957 level.

Investor interest in mutual funds remains strong. Last month, purchases of mutuals totaled over \$122-million, compared to \$107-million in March and \$112-million in April, 1957. Redemptions—cash-ins—were \$32-million compared to \$31.8-million in March and \$37-million a year ago.

Dividend payouts by companies listed on the New York Stock Exchange totaled \$2.2-billion in the first quarter—a record high for the initial quarter of any year. But the National Securities & Research Corp. warns that dividend payments will be declining during the rest of 1958.

# In Washington

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## St. Lawrence Seaway Developer Gets Unintended Immunity to Damage Claims

A legal quirk has given the St. Lawrence Seaway Development Corp. immunity to damage claims. That is the effect of a ruling issued last week by the General Accounting Office, which nevertheless is unhappy about the situation that produced the ruling.

The situation stems from insistence of the Army Engineers, contracting officers for the seaway project, that the U.S.—rather than the development company—be a party to construction contracts. Now, contractors have entered claims for more than \$6-million, based mainly on allegations that excavation work was more difficult and more costly than government information indicated in plans and specifications.

Comptroller General Joseph Campbell issued his ruling without regard to the merits of the claims. He held that any claims that are sustained will have to be paid out of funds appropriated for the Army Engineers and not the development corporation's treasury, which is supported by a user toll structure designed to cover such potential damage payments.

Campbell suggests that Congress may have to adopt a law to shift financial responsibility in such cases to the corporation. Informed sources, who say the corporation wanted it that way in the first place, indicate that Congressional action would not affect existing toll rates.

. . .

## National Airlines' Giveaway Contest Produces Unprecedented Legal Tilt

National Airlines and the Civil Aeronautics Board are hooked up in an unprecedented legal tilt revolving about one of the oldest, surest promotions for stimulating sales—the giveaway contest.

This is the problem: Does National's sponsorship of a \$75,000 contest (first prize: a \$25,000 Florida home and up to \$10,000 cash) amount either to "unfair competition" with other carriers or to a rebate to its own passengers? The CAB says yes; National says no.

A lot of other airlines have a stake in the outcome. Attorneys for all parties say they believe it is the first time that federal regulators ever have been called upon to consider the propriety or legality of such a contest involving a common carrier of any kind.

National contends that it gives its passengers—the only persons eligible to enter the contest—nothing of substantial value, merely a contest blank and an opportunity to write a 25-word sentence that may or may not win them a prize given, free of charge, by outside manufacturing companies.

If National wins its legal point, some airline people foresee the possibility of contest "races" developing between carriers on the most competitive runs. Should

National lose, it would be served with a relatively harmless cease and desist order (probably after the June 30 expiration date of the contest). But more important, CAB then would be likely to examine the propriety of extras offered by other airlines—orchids, silver spoons, overnight sleeper bags, or free champagne or liquor on certain luxury flights.

. . .

## Polio Vaccine Price Collusion Denied by Indicted Drug Houses

A federal grand jury this week returned criminal indictments against five major pharmaceutical companies, charging illegal conspiracy to fix prices and eliminate competition in the sale of Salk polio vaccine to federal, state, and local government agencies.

Named as participants in the alleged conspiracy are Eli Lilly & Co., Allied Laboratories, American Home Products Corp., Merck & Co., and Parke, Davis & Co. All denied any collusion.

The Justice Dept. began investigating the sale of Salk vaccine after Congressional testimony about two years ago turned up complaints by local and state officials—particularly from Milwaukee—that they were receiving identical bids and fixed prices on sales of vaccine. The indictments were handed down by a grand jury sitting at Trenton, N. J.

The grand jury says the five companies conspired to (1) submit uniform bids to public agencies, (2) adopt noncompetitive terms and conditions of sale, and (3) establish uniform pricing methods.

Lilly, by far the largest vaccine producer, calls the indictment "complete nonsense," and points to five voluntary price reductions since the vaccine first became available. Merck & Co. said it could have charged more than the market price when it went into production late, but instead charged the market price to alleviate the shortage without being accused of profiteering.

Antitrust chief Victor Hansen says the government will use a 1956 law for the first time to sue the vaccine manufacturers for actual money damages incurred by the government as a result of the alleged illegal price conspiracy.

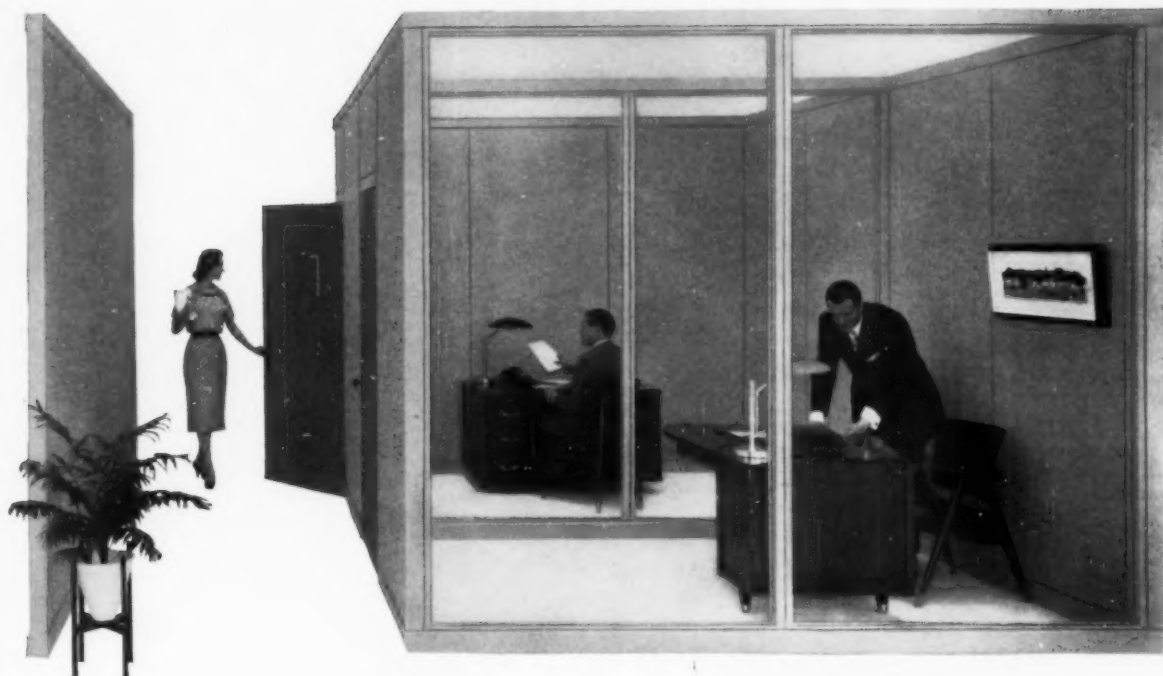
. . .

## Senate Hikes Aid to Depressed Areas, But House Is Ready With the Ax

The Senate this week passed, and sent to almost certain death in the House, a bill to supply \$375-million to stimulate chronically depressed areas.

The Senate proposition: \$75-million a year in gifts to lure new industry to distressed areas, plus a \$300-million revolving loan fund for development of community facilities. The measure is in the hands of a House labor subcommittee—headed by Rep. Phil Landrum (D-Ga.)—that probably will not even give it hearings.

In any event, the Administration would not accept the Senate package, which is lavish by comparison with Pres. Eisenhower's request for a \$50-million federal loan authority to aid distressed areas.



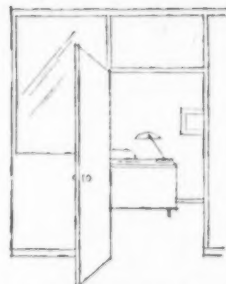
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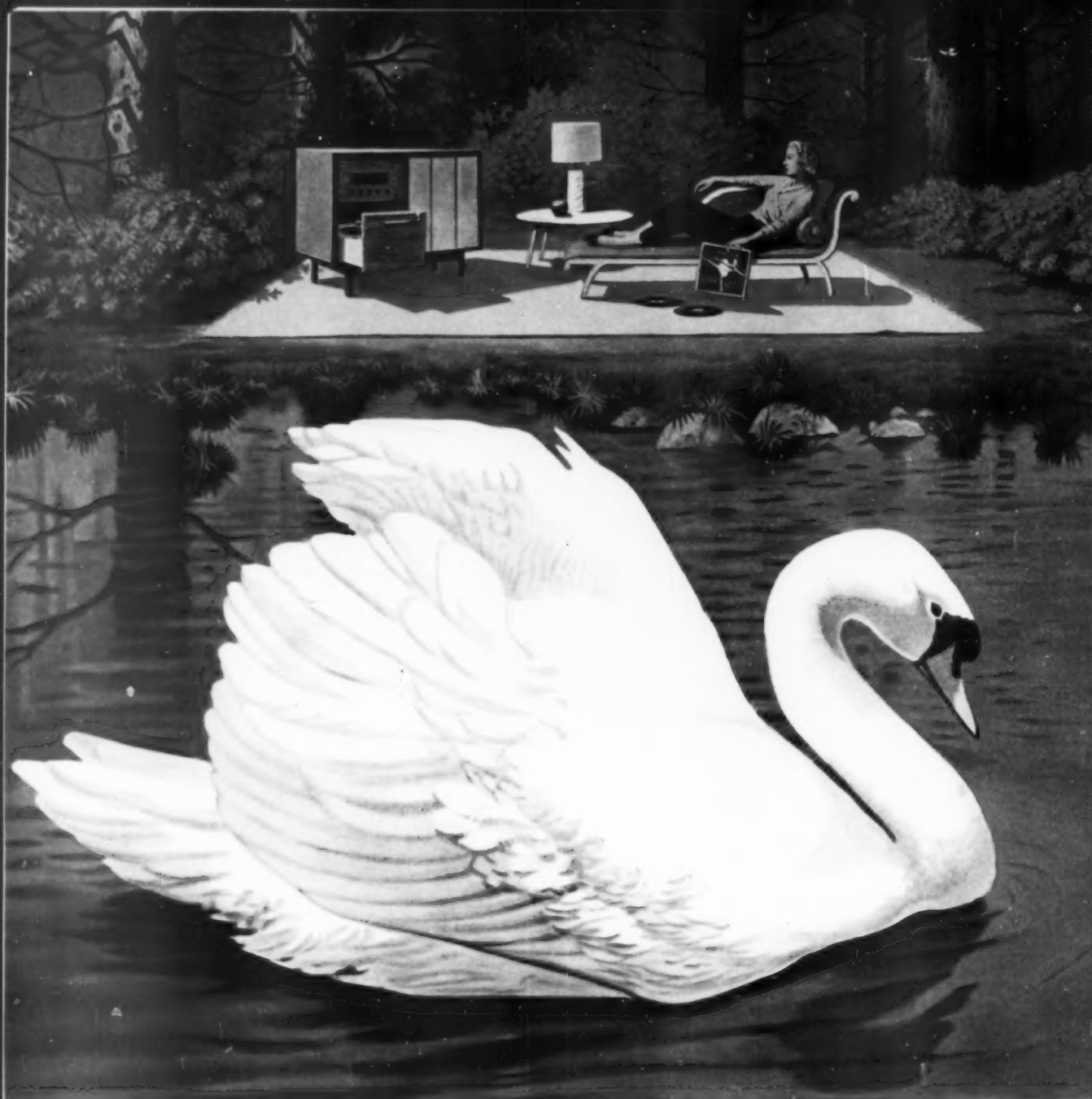
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*Painting by Steven Dohanos*

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# PERSONAL BUSINESS

BUSINESS WEEK

MAY 17, 1958



A great many people are inclined to ignore trusts as a method for estate planning—they think of them as narrow, inflexible, costly.

The truth is, the trust is a relatively inexpensive device, and can be set up in many ways to suit any number of individual objectives. In effect, it is simply a way to put property into the hands of expert, professional managers—to act for the benefit of your family before or after your death, or even to take charge of your own property.

Any kind of property can be transferred to a trust—stocks, bonds, real estate, even a business. You can set it up while you're alive (living trust), or in your will (testamentary trust). Both types accomplish the same thing: Your property is given to a trustee who handles it for the person or persons you want to benefit—and that can include yourself.

The trustee can be an individual, a bank or trust company, or both. He owns the property—legally. But he has limited rights: He must follow closely the directions you have outlined in the trust agreement, and in doing this he must conform strictly with safeguard rules imposed by state law. His failure to conform can land him in serious legal trouble.

The type of trust you set up depends, of course, on your purpose. Best known is the irrevocable trust, where you make a complete surrender of your rights in the property. This is a serious step—once taken, it can't be undone. But it carries with it some striking advantages. For example, generally you can avoid both the tax on income from the trust property, and the estate tax—when the beneficiary is someone other than yourself.

You may have to pay a gift tax when you create the trust, but note that gift tax rates average about 25% lower than estate tax rates.

Next is the revocable trust, where you have the right to change or terminate the trust at any time. Here, there is no income or estate tax saving. But it's an effective way to have an expert manage your assets and, if necessary, apply them for your use during an illness or in your old age. Besides, there are these advantages, which do not exist when you will property:

- You set in motion a program to benefit your family while you're still living. You are still around to gauge the trustee's ability to do the job—and you can make changes in your plan before it's too late to act.
- The trust will continue to operate after your death, giving your family immediate benefits (without long will-probate delays).
- The trust gives you privacy in many cases—property moving under it may not have to become a matter of public record.

A short-term trust can be thought of as lying between a revocable and an irrevocable trust. Actually, it's irrevocable—but limited to a specific number of years.

In general, the short-term trust permits you to give some of your income to a third person (child, parent, charity) for a fixed period of time—without personally paying income tax on the amount. The beneficiary pays the current income tax. For an individual beneficiary, the term of the trust must be at least 10 years; for a charity, the minimum term is two years.

At the termination of the trust—that is, on the fixed date, or upon the prior death of the income beneficiary—you get back your stock, or bonds, or other trust property. (Warning: In setting up this kind of trust, remember that the gift of income is subject to gift tax regulations.)

# PERSONAL BUSINESS (Continued)

BUSINESS WEEK

MAY 17, 1958

Finally, there's the **life insurance trust**, where the trustee receives your life insurance proceeds. There are at least two advantages:

- You can direct the trust to pay estate taxes, debts, and administrative expenses of your estate. You have no assurance your beneficiary will use the insurance proceeds for these purposes; the insurance trust guarantees it.
- You can direct it to buy up the non-liquid assets of your estate and hold them until they can be sold at a reasonable price. This eliminates the chance that heirs may pressure executors into selling at an unprofitable time.

These are but a few of the highlights, of course—you'll want to go into the trust idea thoroughly, with the aid of competent trust advisers. The main point to keep in mind is that **the trust device can be about as flexible as you want to make it**—in view of your family situation.

Don't be too surprised if your tax refund is delayed for a few weeks, despite reports that the Internal Revenue Service has managed this year to speed up the refund procedure. True, about 95% of the checks will have been mailed about two weeks ahead of schedule—but the other 5% will be held up for "pre-refund audits."

If you have multiple sources of income and numerous or questionable deductions, it is likely you will have to wait. If your refund is delayed beyond May 31, some of the sting is taken away by interest the U. S. pays—6% figured from Apr. 15 to date of refund, assuming you filed by Apr. 15.

A new "clearing house" may help a qualified high school or preparatory school senior in your family circle enter college. The plan also will help some colleges fill freshman vacancies.

Here is how the College Admissions Center will work: A graduate who has not found a college by June 1 contacts the center at Glenbrook High School, Northbrook, Ill. If he wants to register with C.A.C., forms will be sent upon payment of a \$10 fee.

When any college or junior college has openings, its admissions director can check the center's files to select possible applicants. After a student has applied, his C.A.C. registration will be taken out of the active files.

Word of the establishing of the center is being widely publicized among colleges and secondary schools by the Assn. of College Counselors, which conceived the plan, with a financial assist from the Sloan Foundation.

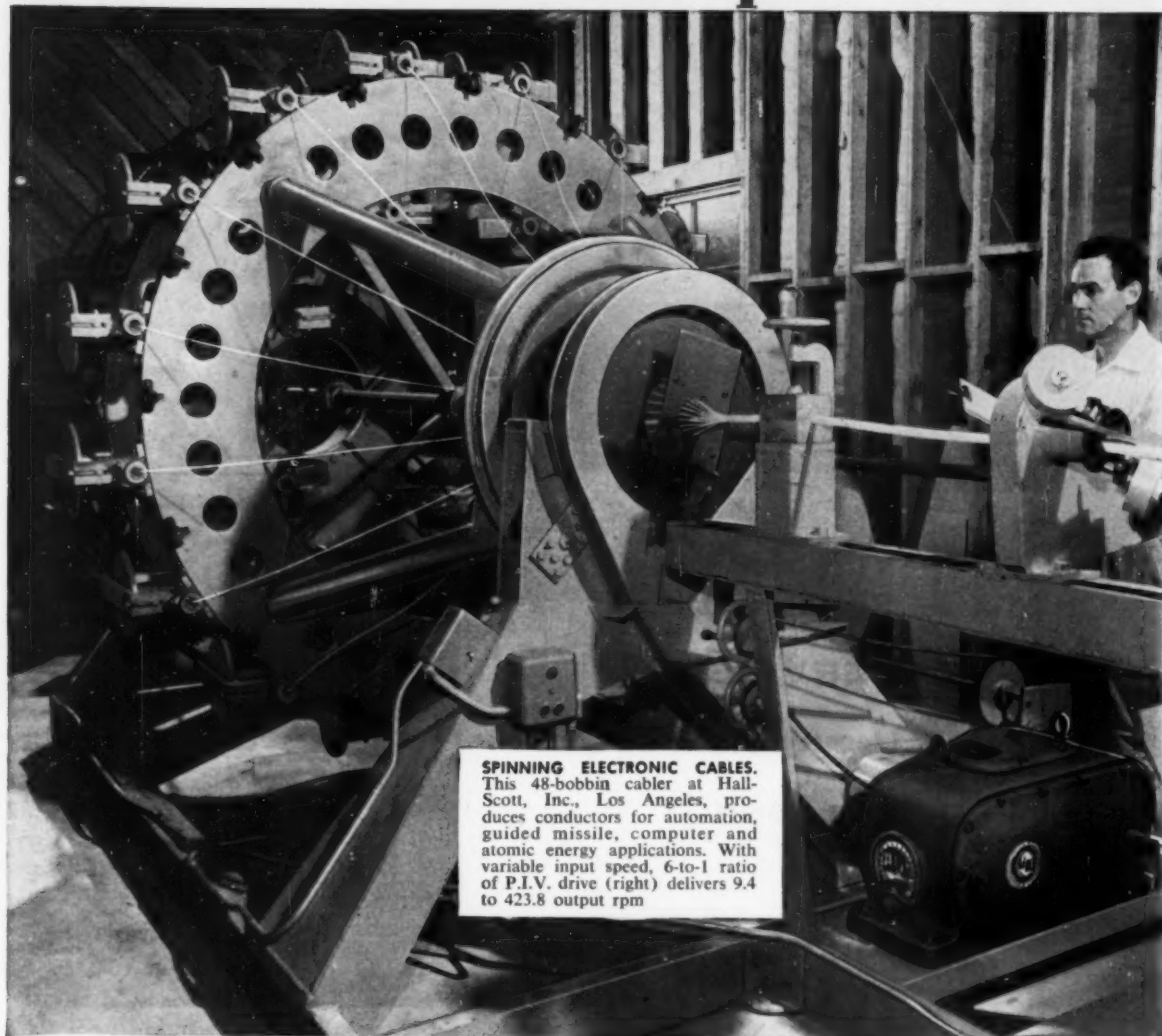
The \$3 "no-show" penalty for air passengers who don't pick up their reservations is going out the window. The Air Traffic Conference, representing scheduled airlines, has voted to abandon the penalty as of Aug. 12. It will be in effect, on all lines, until then.

The conference voted to extend, at least until Dec. 1, two other ticketing provisions:

- The rule that tickets must be picked up in advance of flight, at or before a time agreed upon between passenger and airline.
- The reconfirmation rule, which says that a passenger on a layover between flights, or on a return flight, must notify the airline within a specified advance time that he intends to use the space reserved.



# Pace-setter for variable speed machines



**SPINNING ELECTRONIC CABLES.** This 48-bobbin cabler at Hall-Scott, Inc., Los Angeles, produces conductors for automation, guided missile, computer and atomic energy applications. With variable input speed, 6-to-1 ratio of P.I.V. drive (right) delivers 9.4 to 423.8 output rpm

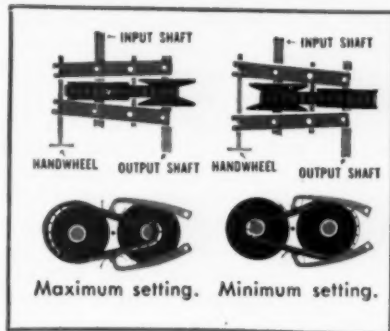
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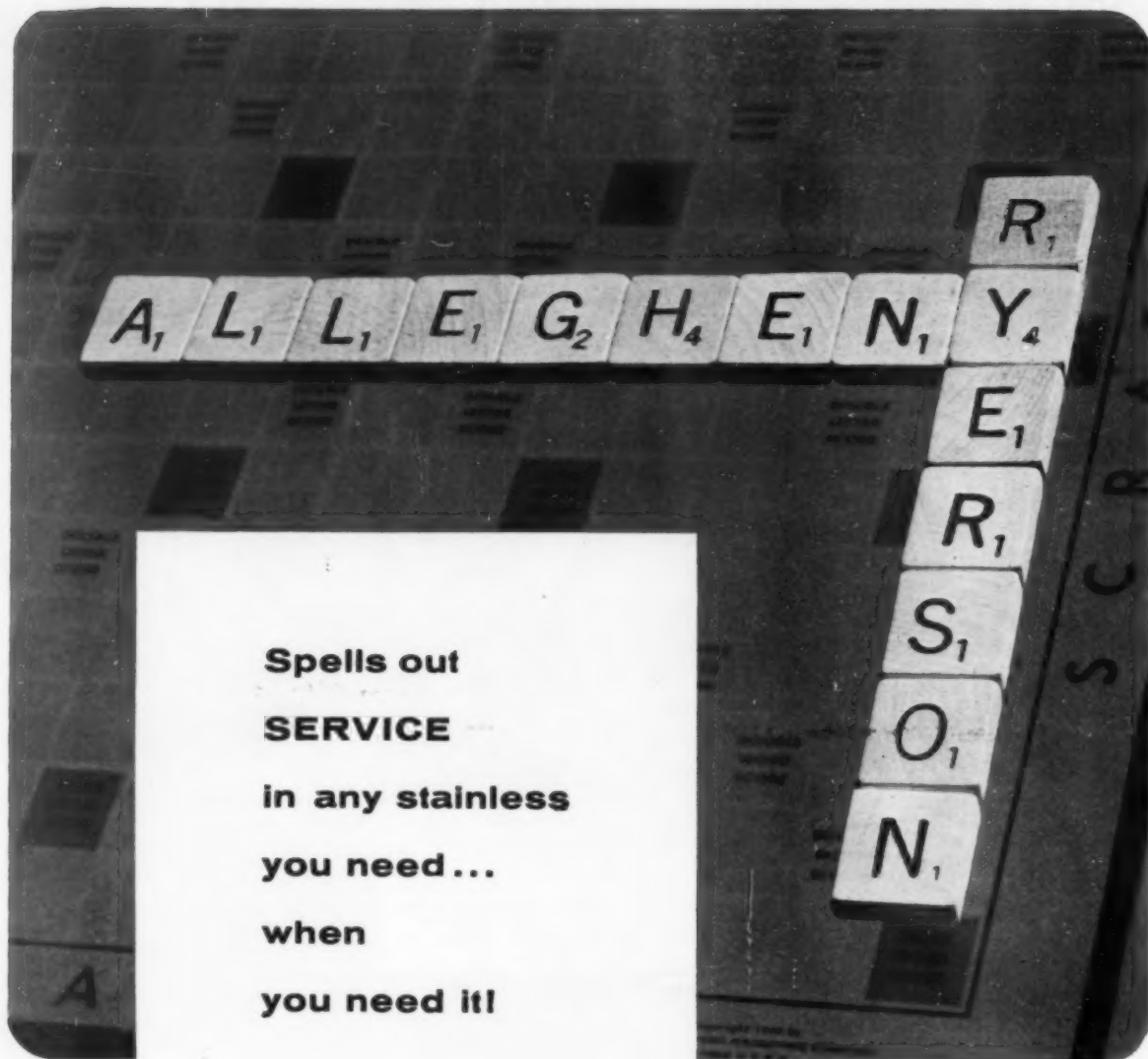


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# In Production

• • •

## Urethane Foam Moves Into Furniture In Big Way, Challenging Foam Rubber

The furniture industry's changeover to urethane foam for cushioning and padding is taking on the aspect of a mild stampede. Reports from Chicago's winter furniture market indicate that more than 135 companies are incorporating the light-weight, resilient foam in their lines.

This week, Heritage Furniture, Inc., of High Point, N. C., announced that from now on it will use urethane in all lines of upholstered furniture. Foam rubber and built-up coil cushions will be relegated to "special options," according to John Tapner, senior marketing vice-president. Shaw Mfg. Co. of Charlotte, N. C., also is switching to the polyether type of urethane.

Both companies say that this material is superior to any cushion now available because of its resiliency, light weight, superior resistance to cleaning solvents, and lower cost. Crest, Inc., of Asheville, N. C.—one of the first to use the new material for backing and padding in place of conventional cotton, felt, or sisal—says it reduces labor costs up to 35%.

The switchover to urethane from foam rubber may precipitate a knock-down, drag-out fight between the two materials. Urethane sales are running at a fraction of plant capacity of such producers as Mobay Chemical Co., Allied Chemical Corp., and du Pont. "You can bet no one is making money on urethanes," says one chemical marketing man. "But it is a question of which comes first—the low price or the big market. We think at our present price we can build a market fast."

• • •

## Gas Turbines Are Making Headway In Helicopters for the Military

Gas turbines for helicopters are moving closer to actual military operation. Latest step is completion of the 50-hour preliminary flight test for the T-55 gas turbine made by Lycoming Div., Avco Mfg. Corp.

The T-55 passed the test in a turboprop version that develops 1,676-hp. The Army now is emphasizing development of the helicopter version of the T-55, with a military rating of 1,850-hp. In addition to using it in large helicopters, the Army is considering using two of these engines in turboprop fixed-wing aircraft.

Lycoming last month announced an Air Force-Army contract for the smaller T-53, which it says is the first for major production of a helicopter gas turbine. The contract calls for delivery of over 100 T-53s starting next January; Lycoming already has received a \$3-million contract but expects the total order will run to \$10-million.

General Electric Co.'s T-58 is the T-53's chief competitor. GE has a \$5.4-million contract with the Navy

## MORE NEWS ABOUT PRODUCTION ON:

- P. 159 U.S. Orders Some Jeepier Jeeps—A New Family of Military Vehicles Holds Commercial Promise.

for the T-58 in less than production quantity. The T-53 develops 825-hp. in the helicopter version, 960-hp. in the turboprop model.

• • •

## Giant Tank and Dry Cargo Barge Launched; Can Carry as Much as a Liberty Ship

Commissioning of the world's largest tanker and dry cargo barge in Seattle this month stressed the versatility toward which the long-haul section of the barge industry is moving. The \$1.5-million barge, with the capacity as great as a Liberty ship, was built by Todd Shipyards for the Upper Columbia Towing Corp., of Vancouver, Wash.

The barge's versatility is marked in the cargo handling layout, with its 32 tanks holding 3-million gal. and a deckhouse with 170,000 cu. ft. of dry cargo storage space. Three 75-ton whirly cranes handle the dry cargo and there are four 3,600-gpm. pumps to discharge liquids.

The barge is 300 ft. long and 75 ft. wide, and is designed to operate in the open sea as well as in sheltered waters.

• • •

## Production Briefs

Brush Beryllium Co., Cleveland, has received what is reportedly the largest commercial contract ever made for fabricated beryllium metal. The \$1.2-million deal was made by Centre d'Etude de l'Energie Nucleaire of Belgium. Brush will make two core matrices to house fuel elements for a high flux materials and engineering test reactor now under construction at Mol, Belgium.

A new process for recovering helium gas has been discovered by Bell Telephone Laboratories' scientists. At present, helium is recovered only from natural gas. But because it is too costly to build and operate standard compression-type recovery units at every natural gas field, government plants recover only about 1-million cu. ft. of helium per day, while an estimated 10-million cu. ft. is lost. The new process separates helium from natural gas and other elements found with it by diffusing it through the tiny walls of fine glass tubing, which allow the helium atoms to pass through, while resisting the passage of other gases.

High-density polyethylene (BW-Feb.23'57,p94) is invading the drug and cosmetic container field. Lerner Plastics, Inc., Garwood, N. J., and Plax Corp., Hartford, Conn., are making containers for cold cream from plastics produced by Celanese Corp. of America and Phillips Chemical Co. Plax also is making high-density polyethylene bottles from Hercules Powder Co. materials for Breck hair preparations.



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A generous water supply is but one factor influencing steady industrial growth in *The Land Of Plenty*. Other advantages include an abundance of high-grade, all-purpose Bituminous Coal and limestone, ample power, dependable workers, favorable tax structures and efficient N&W rail service.

There are plenty of good sites available, many at streamside, and N&W plant location specialists will be glad to tell you about them in detail . . . in confidence and without obligation.

If a water shortage could mean withered production, dried-up profits for your new plant — don't risk it! Put it in *The Land Of Plenty* where adequate water and other vital resources are available.



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# U.S. Orders Some Jeepier Jeeps

Wilys offers two candidates, is producing one of them already, and AMC jumps in with its long-awaited Mighty Mite.

However Detroit settles its debate about making a small car for the mass market, there's one customer who's assured of getting such a car out of Detroit or Toledo. That customer is Uncle Sam.

When the Defense Dept. went shopping for an alternate to the Jeep, its old standby, it had no idea of settling for a face-lifting job—for tail fins, four headlights, and bigger Dagmars on the bumpers, built around the same old frame and engine. It demanded—and is getting—vehicles that are radically different (pictures).

Like new military airplanes, these vehicles have more or less potential also in the commercial market. Whether they are adapted piecemeal or in toto, they can be expected to have a strong influence on the U.S. automotive field.

• **Under Orders**—So far, the armed forces have placed orders for several hundred vehicles of two types and for a prototype of a third:

The **Mechanical Mule** (bottom picture) is already in production at Wilys Motors, Inc., in Toledo, under a \$7.2-million contract.

The **Mighty Mite** will be built by American Motors Corp. in Detroit, under a letter of intent written by the Marine Corps a couple of weeks ago, calling for 250 units at a total cost of \$6-million.

A bigger version of the **Mule**—(top picture), unveiled by Wilys only last month, has already been ordered by Army Ordnance under a prototype contract.

All three are what Wilys people are calling "platform-type" vehicles. In their more primitive form, as in the Mechanical Mule, they are little more than sturdy table tops on wheels. The larger version seats six as a personnel carrier, but the seats (except for the driver's) can be quickly folded flush to leave a clear platform for cargo or weapons.

• **Radically Different**—All three vehicles have some distinct differences from the general run of U.S. automotive products. Their engines are air-cooled rather than liquid-cooled; they have light metal frames and bodies; they stand less than 30 in. high and have extremely short wheelbase and turning radius.

Most important from a mass-producer's viewpoint, the engines are made of aluminum and are designed for pro-



**WILYS SIX-PASSENGER MULE** converts into flatbed carrier with a flip of its seats. Defense Dept. has ordered prototype. It's a cousin of original Mule (below).



**ENGINE** for production models is 4-cyl., air-cooled aluminum that can be die cast in volume.

**HALF-TON MULES**, left, await shipment. They have only a seat for the driver, no springs.



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duction by die casting. Until volume of orders increases sufficiently, they will be produced by sand casting; a separate set of mold and core is needed for each engine block, and the roughnesses have to be machined off. Die-casting machines, on the other hand, use steel molds that can spew out engine blocks at the rate of one per minute or less, and the die-cast parts need little machining.

This kind of high-speed production of the lightweight engines must wait upon bigger volume because steel molds and die-casting machines of the size and complexity needed for engine blocks are far too expensive for runs of a few hundred items. Both Willys and American Motors are confident of getting orders that are big enough.

• **Workhorses**—The new family of military workhorses will inevitably be compared with the Jeep. This is how some of their specifications stack up:

**Military Jeep.** Weight, 2,665 lb.; payload, 800-1,000 lb.; wheelbase, 81 in.; turning radius, 19 ft.; horsepower, 70; speed, 65 mph.

**Mechanical Mule.** Weight, 900 lb.; payload, 1,000 lb.; wheelbase, 57 in.; turning radius, 10 ft.; horsepower, 16; speed, 25 mph.

**Mighty Mite.** Weight, 1,496 lb.; payload, 500-1,000 lb.; wheelbase, 64½ in.; turning radius, about 16 ft.; horsepower, 60; speed 60 mph.

**Big Mule.** Weight, 1,500 lb.; payload, 1,500 lb. plus driver; wheelbase, 80 in.; turning radius, 10 ft.; horsepower, 100; speed, 60 mph.

Willys claims each of its Mules can climb a 60% grade with its full payload. Both have four-cylinder engines, are lightweight and turn tightly.

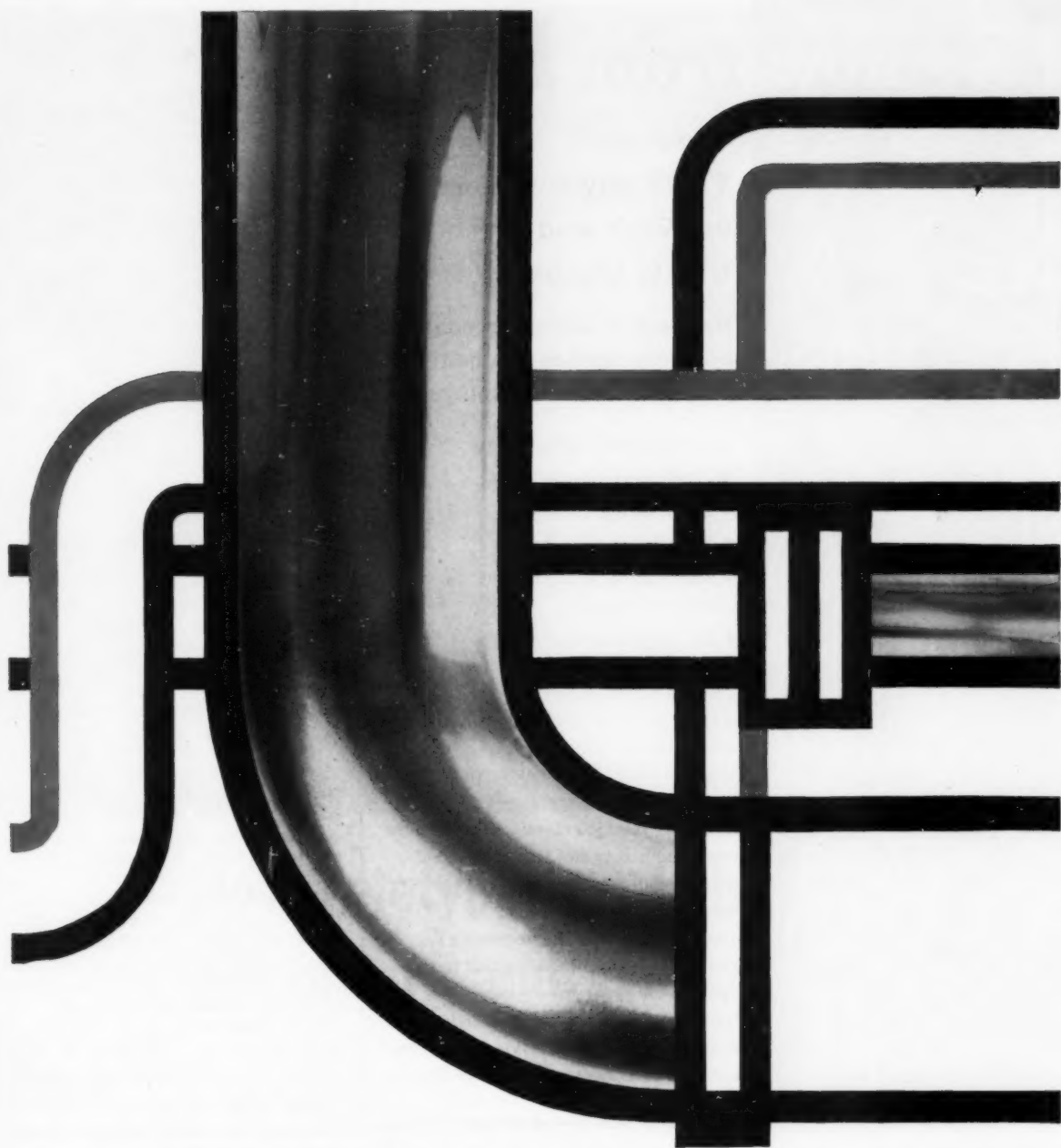
They can move as slowly as 1 mph.; the original Mule has a steering column adjustable to three positions, so the driver can either ride, walk beside it, or even crawl beside it. Stripped for combat, it stands only 27½ in. high.

• **Military Values**—Both Mules (the larger model isn't yet named and may include the word "Jeep" in its official title) are designed to fit the special needs of a new airborne fighting force.

The Mechanical Mule itself, in production since last September, is designed strictly to work with the combat infantryman and to be transported with him by air. It can be landed by helicopter or dropped by parachute.

"The Army has to travel light these days," says S. W. Connelly, Willys' director of government sales. "So the Mechanical Mule we're now producing comes stripped to the bone—no headlights, no springs, only a driver's seat and a top speed of 25 mph."

The huskier Mule or platform-Jeep is also light enough to travel by plane and be dropped by parachute. It can be quickly adapted for use as a personnel



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carrier, weapons carrier, guided missile carrier, or ambulance. It can be converted into a floating vehicle, with a rear power take-off to be hooked to a propeller.

"These new carriers," says Connelly, "are the first tactical vehicles for the armed forces that can carry a cargo equal to their own weight. Most tactical vehicles carry about half their weight."

• **New Engines**—For the original half-ton Mule, Willys designed a wholly new aluminum engine. "There was no similar engine we could find—and there were very few of them on the market at all when we entered this project—that could meet the required characteristics of the Mule's power plant," says a Willys engineer.

This engine was tested for 630 hours before production and, says the engineer, "performed beautifully for the whole time."

"We liked the air-cooled engine idea from the start, for this new type of vehicle," another engineer comments. "Remember, when you have a water-cooled engine, with its coolants and hoses, if a bullet goes through the radiator, you lose an engine."

The newer and bigger platform vehicle has a much different, much bigger aluminum engine. On its development, Willys spent \$2-million of its own money, prior to getting the prototype contract. It feels the money was well spent, since the new line of engines has possibilities for the company's broad line of trucks and utility vehicles. "We like it very much for the future," says a top-ranking Willys engineer.

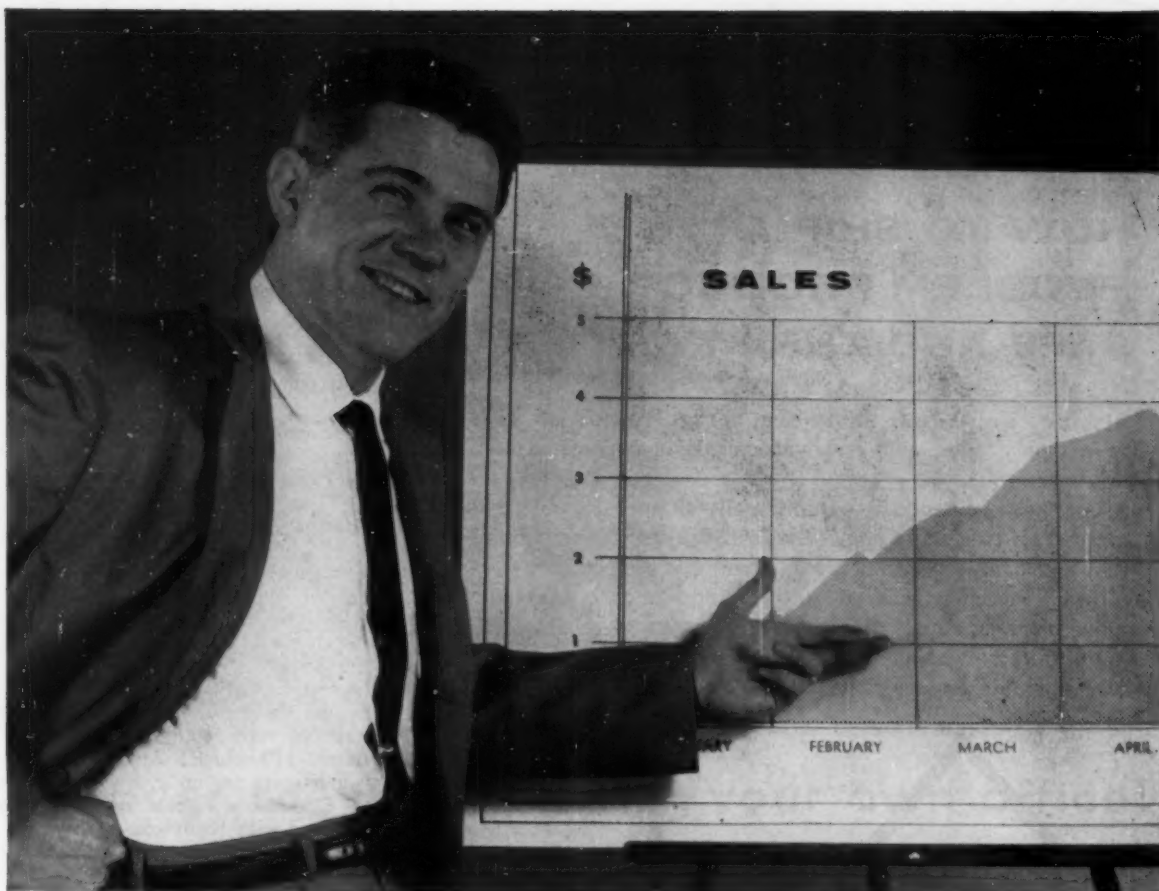
• **Commercial Values**—In a six-page study entitled "Some Suggested Markets for the Commercial Mule," Willys has identified 18 groups of potential buyers, ranging from apiaries to airports and from orchards to warehouses.

With their ability to go anywhere, to carry odd sizes of cargo and a lot of it, to crawl at walking speed with the driver alongside on foot, the platform vehicles could do dozens of jobs on farms and ranches. In orchards, Willys thinks they would be ideal for moving along the rows, ducking under low branches, providing a platform for spraying or picking, and hauling fruit.

Even the larger cousin of the Mule stands only 29 to 34 in. high, and both Willys cars can move under the wings and fuselages of planes at air terminals. So they are regarded as a strong candidate for hauling freight and baggage at airports as well as at railroad stations.

However, Willys officials aren't talking much about the commercial uses. "We don't want to get anyone excited and thinking that the commercial Mule, or whatever we call it, will be out





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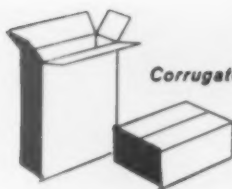
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For more information, please write to Teletype Corporation, Dept. 10E, 4100 Fullerton Avenue, Chicago 39, Illinois.

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Corrugated Fibre Boxes



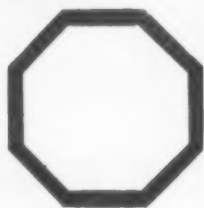
Corrugated Paper Products

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A copy of the company's latest financial report may be obtained by writing to Harold M. Treen, President Fort Wayne Corrugated Paper Company Fort Wayne 1, Indiana

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50<sup>th</sup>  
YEAR

tomorrow," a spokesman says. "And we don't want to take the edge off our present Jeep business, either."

But the betting around Toledo is that the Mechanical Mule has a good chance of siring a new branch of Willys' family of four-wheel-drive utility vehicles. By sticking to this specialized field, Willys last year rolled up a profit of more than \$5-million.

• **Mighty Mite**—Willys may get some new competition from American Motors, whose initial order for its Mighty Mite last week capped nearly four years of negotiation.

AMC bought development rights to the vehicle in 1954 from Mid-American Research Corp. At that time, the government turned it down because it was designed with a German-made Porsche engine. AMC then designed the engine it now offers. It's basically a "V" of two cylinders that can be arranged in multiples for four, six, or eight cylinders.

Originally, AMC had hopes of landing the military contract to cover development costs and of then adapting the engine for its small automobiles. At the moment, with Rambler production at capacity, the company is less excited about this possibility than it was four years ago. To make the contracted 250 vehicles, American Motors will have to set up a new work crew in Detroit—its regular labor is fully occupied with Ramblers.

• **Aluminum Engines**—Whether or not volume of the platform vehicles gets high enough to warrant tooling for die-cast aluminum engines, there's enough interest throughout the industry to assure eventual development along this line. Doehler-Jarvis Div. of National Lead Co., in Toledo, has die-cast six-and-eight cylinder engines on huge machines. The Detroit grapevine is humming with rumors that General Motors Corp. is tooling up for an aluminum engine for a small car, perhaps its Australian-built Holden.

Aluminum air-cooled engines for small U.S. cars will automatically be held up to the Volkswagen engine for comparison. The resemblance of the Willys motor to the 36-hp. VW powerplant—a 4-cylinder air-cooled pancake type—is fairly close. The VW has a lightweight crankcase and other large parts of magnesium, but the parts are not die-cast.

Although the VW's reliability and freedom from trouble, a gain largely from being air cooled, have helped the car to sell in the U.S. on a waiting-list basis, its power plant is an old design. It hasn't been changed significantly since the 1930s, before anyone thought of die-casting a cylinder block. U.S. manufacturers are confident that they can come up with a better and cheaper engine. **END**



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surprisingly low price tag makes them an outstanding value. Ask your Steelcase dealer about his free 10-day trial offer. Steelcase Inc., Grand Rapids, Michigan. In Canada: Canadian Steelcase Co., Ltd., Don Mills, Ontario



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## PLANNING A PLANT?



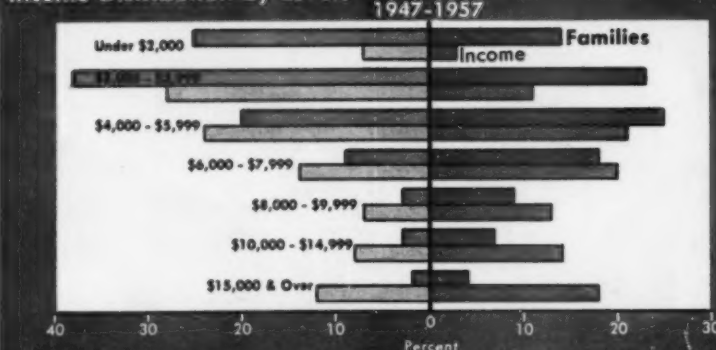
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**WEST VIRGINIA**

## CHARTS OF THE WEEK

### Income Distribution by Levels 1947-1957



Data: Dept. of Commerce.

## Higher and Spread More Evenly

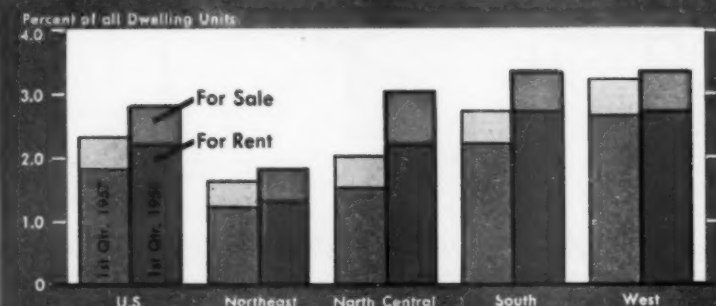
Incomes last year showed a much even distribution than in 1947. The average income of families and individuals reached an all-time high of \$6,130, compared with \$5,910 in 1956 and \$4,130 in 1947. But the decade's gain of approximately 50% shrinks to about 20%, after adjusting for the change in purchasing power.

The rise has shifted families into higher-income levels. The number of

families in the less-than-\$4,000 bracket dropped from 28.2-million in 1947 to 19.4-million in 1957. About 37% of all families are in this group, compared with 63% in 1947. This group earned 14% of the income in 1957; in 1947 it earned 35%.

In the same period, the number of families with incomes above \$4,000 more than doubled—from 16.5-million to 34.1-million.

### Vacancy Rates



Data: Dept. of Commerce.

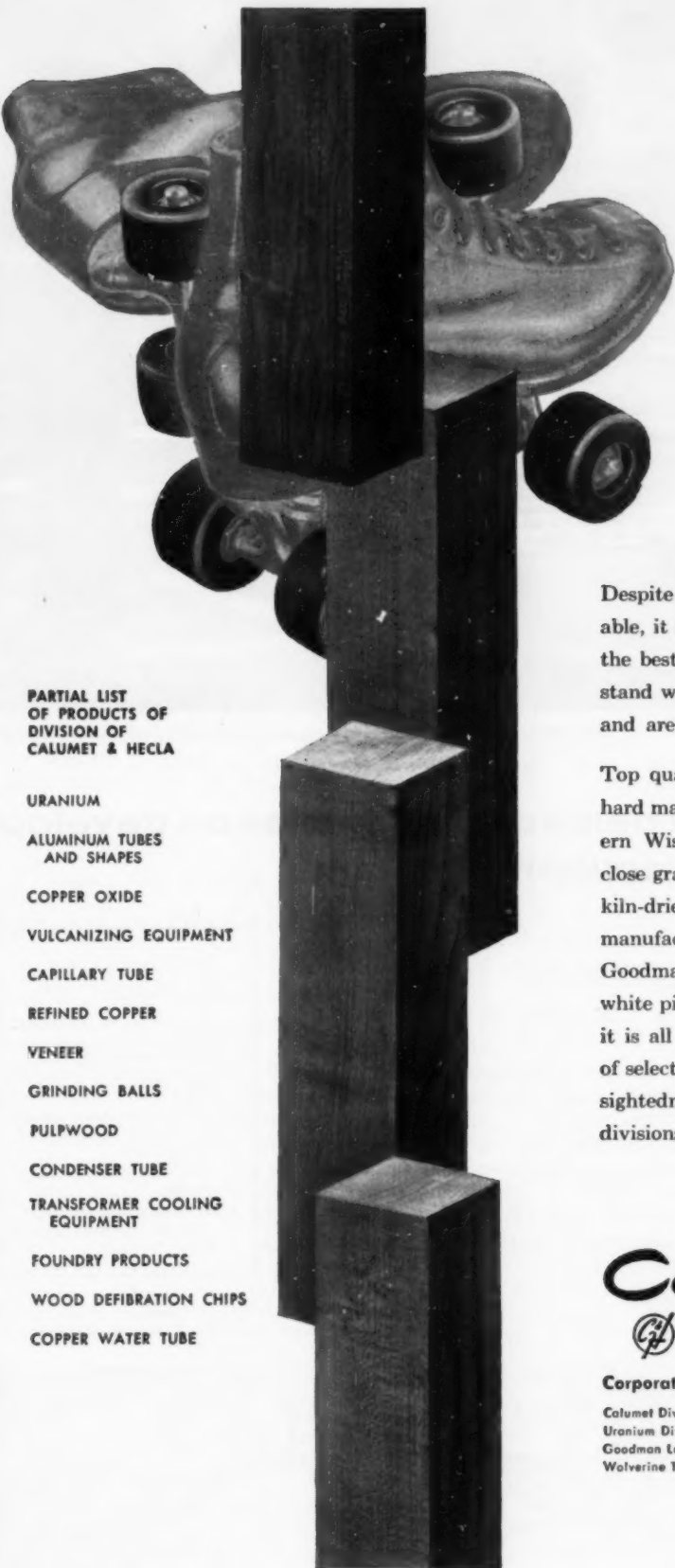
## More "For Rent" and "For Sale"

Apartment and house hunters had a wider range of choice in the first quarter of 1958 compared with a year ago. The vacancy rate for available dwelling units across the nation rose to 2.8% from 2.5% in the fourth quarter of 1957, according to the most recent sample survey conducted by the Bureau of Census. Both "for rent" and "for sale"

vacant dwelling units showed a rise.

The sharp rise this year is due principally to gains in available dwelling units in the north central states and in the South. The available vacancy rate in the Northeast continued to be lower than elsewhere in the nation. In the West, available vacancy rates changed only slightly from a year ago.





## *How to grow skate wheels in the north woods*

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COPPER WATER TUBE

Despite all the wonderful new materials now available, it seems that good old hard maple still makes the best wheels for rink skates. These wheels withstand wear amazingly well, maintain an even tread and are somewhat less slippery than other woods.

Top quality skate wheels are made from selected hard maple grown in the Goodman forests of Northern Wisconsin and Upper Michigan. This tough, close grained wood is thoroughly seasoned, carefully kiln-dried, cut into blocks and shipped to the skate manufacturer for finishing. From the thousands of Goodman acres come basswood, birch, maple, elm, white pine, hemlock, balsam, spruce and cedar. And it is all produced under a carefully organized plan of selective logging . . . another example of the foresightedness and sound management typical of all divisions of Calumet & Hecla.

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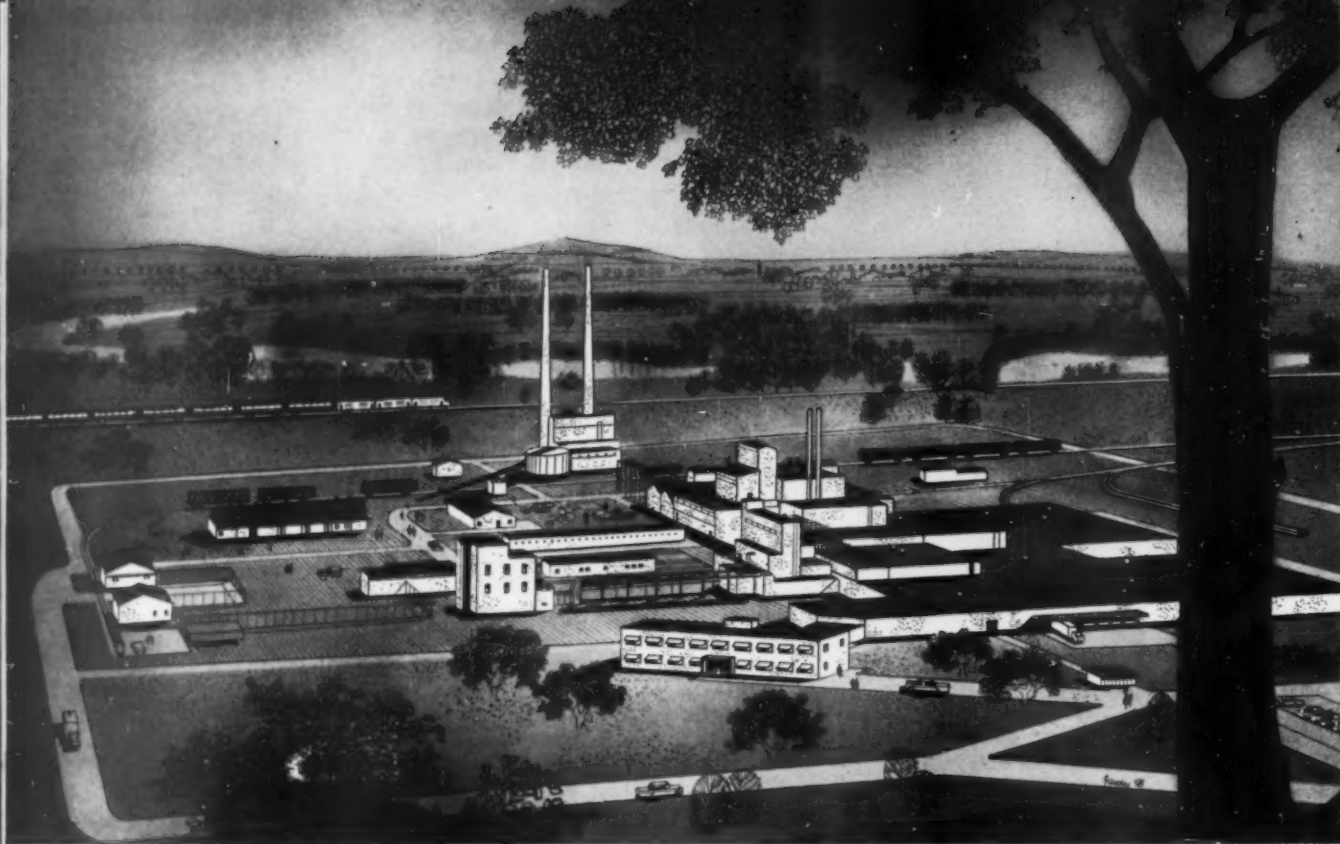
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This new Olin, Indiana, cellophane plant covers more than 5 acres under one roof.

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Write to: Arthur E. Baylis, Vice-President, Department C, 466 Lexington Avenue, New York 17, N. Y.

### New York Central can help you too!

- The services of our Plant Site Consultants, on a strictly confidential basis, are available without charge.
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Large or small, there's a "Central" location on the modern 11,000-mile rail network of the New York Central System that meets your plant-site requirements.

# In Research

. . .

## Pounding the Earth With Tons of Rock Helps Hunt for Mineral Deposits

A new method for more accurate detection of mineral deposits—by pounding on the earth with tons of rock—has been proposed by Thomas Gold and Donald H. Menzel of Harvard.

The scientists told an American Geophysical meeting in Washington that the pounding would set up vibrations that in extreme cases could be picked up by receivers half a world away. Even with pickups at much shorter distances, the new method would permit far more accurate measuring of the waves than is possible with the present seismic prospecting by the use of explosives, where the range for checking "bounces" is very limited.

The Gold-Menzel system is based on a mechanical vibrator, which drives a shaking platform loaded with anywhere from a few tons of rock to several hundred tons, depending on the desired range of check. The hammering on the ground would produce seismic signals at frequencies from 10 to 100 per second. In interpreting the signals, the receivers would be equipped with a new "phase-sensitive integrating technique" permitting the operator to ignore any random earth vibrations that might be mixed in with those set up by the transmitter.

. . .

## It Takes a Quick Look to Detect

### Where New Element 102 Has Been

Scientists at the University of California Radiation Laboratory have confirmed many theories of atomic energy by identifying the presence of an isotope of the long-sought element 102. Like all elements beyond uranium (No. 92 in the Periodic Table), No. 102 must be formed synthetically, and its remarkably short half-life of 3 sec. makes it also difficult to identify.

The California work parallels that done last year at Harwell, England; Argonne National Laboratories, Chicago, and the Nobel Institute in Stockholm, Sweden, by an international team of scientists. But it was able to go a step further by using the university's \$68-million electron-volt Heavy Linear Accelerator (HILAC), completed last year with AEC funds (BW—May 4 '57, p94).

Element 102 was synthesized by depositing a thin layer of another synthetic element, curium (element 96), on a strip of nickel foil and placing the foil in a container of helium gas in an intense beam of carbon-12 nuclei driven by HILAC. As each curium atom captured a carbon nucleus, a new nucleus was formed, four neutrons coming off. Each new nucleus flew off to a metal strip that carried a strong negative charge.

As the 102 atoms decayed in seconds to atoms of fermium (element 100), the fermium was in turn attracted to another plate of foil, which was chemically

## MORE NEWS ABOUT RESEARCH ON:

- P. 170 Joint Medical-Industry Project Is Well on Way to Developing Artificial Heart.

analyzed to prove the presence of fermium and, hence, the previous presence of element 102.

. . .

## RCA's Latest Traffic Control Device

### Tells Speeders to Sin No More

Drivers going a bit faster than the posted limit are startled to see a "Slower Please" sign flashing as they enter the grounds of the Princeton (N.J.) research center of Radio Corp. of America.

The road is a segment of the "electronic highway of tomorrow." Electronic loops, buried in the paving, are hooked to transistorized detector units that measure the speed of each passing car, and then flash their warning to the errant driver.

The new system is a transistorized version of the electronic vehicle control system that RCA demonstrated last year at Lincoln, Neb. There, cars were guided automatically along the road, with electronic signals controlling brakes and steering wheel.

At Princeton, the goal is to establish the practicability of using electronics for finding out whether speed limits are realistic, or for studying driver habits.

Theoretically, in the complete control system, the passage of one car over the electronic loops would set up signals that would be fed back into the automatic controls of following cars, or would actuate roadside warning devices.

. . .

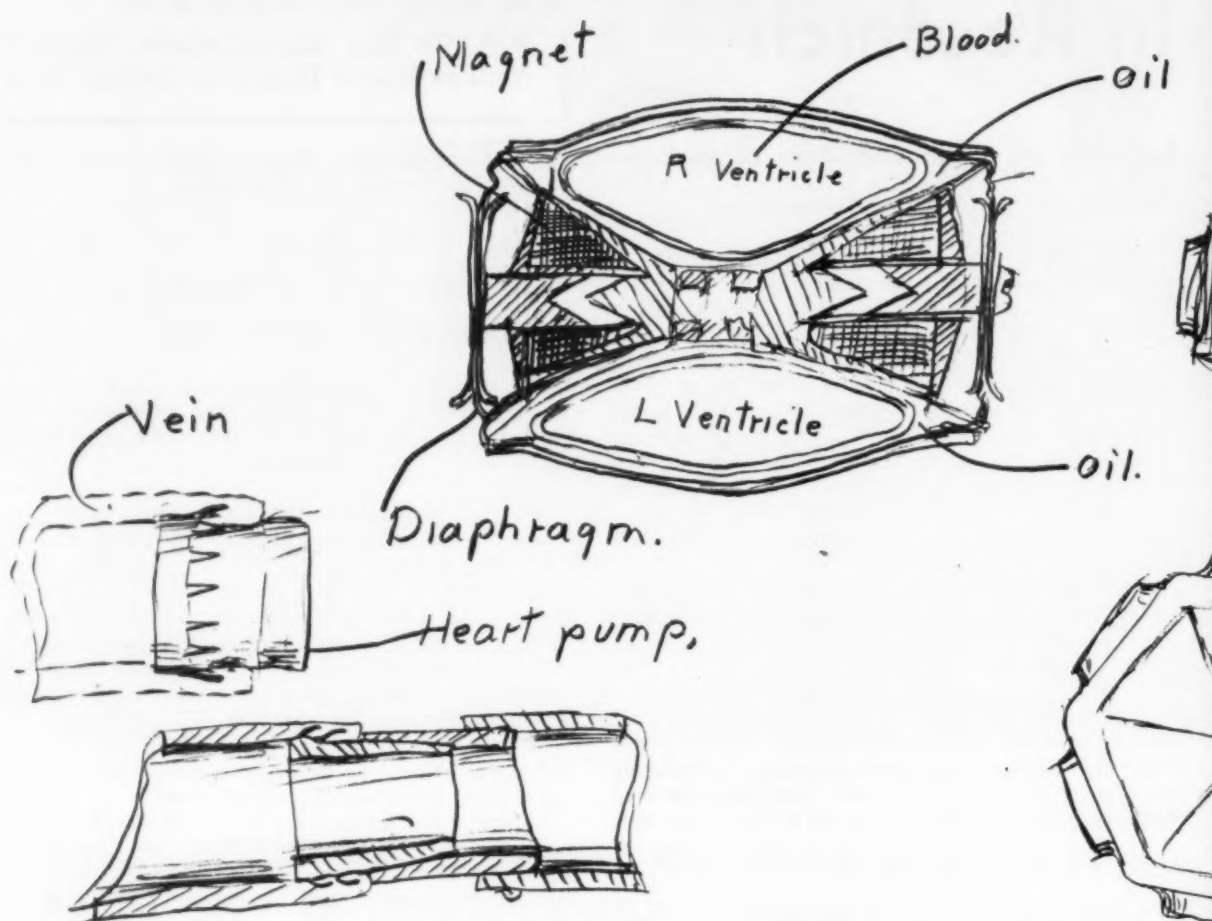
## Teaching Radios to Pick Out Signals

### From Babble on Crowded Airwaves

Can radio receivers be trained to focus on one sound among many, the way the human ear can tune in on a fainter, more distant conversation at a party? Two Air Force scientists, Irwin Pollack and J. M. Pickett, reported on their findings last week at the Acoustical Society of America meeting in Washington.

This problem in acoustics is to find out how a person can hear and understand the more distant speech, despite nearer louder interference. Pollack and Pickett have tentatively decided that the listener can "cut through" distracting noise by unconsciously tuning both ears to the exact frequency range of the speaker's voice. The next step is to apply this technique, electronically, to radio receivers that must operate where the airwaves are crowded.

In another paper, researchers from Massachusetts Institute of Technology reported 98% success with a new computer that can recognize and record spoken numbers despite differences between male and female voices, regional accents. It's a step on the way to developing machines that can transcribe the voice.



SIX SIDED HEART (shown in cross-section, side, and top views) will use five magnetic pumps, attached to five sides, for heart action. Six side has tubes for blood flow (with spikes to hold blood vessels, as drawn at lower left), and wires to connect to outside battery or current.

## Medicine and Industry Team-Up

Cleveland Clinic and Thompson Products, working together, are well on way to developing a successful heart pump; before they can substitute it for real thing, there are a host of medical problems to be solved involving effect on body.

For centuries the primary concern of medical science has been to find the causes and cures of disease. Medical research seldom strolled far from this path of interest. Recently, however, a new area of research has become increasingly important to medical men—the function of bodily organs, and the duplication of these functions by artificial means.

With this growing interest in duplicating the functions of the body has come a whole new set of technical problems. Since many of these new problems are mechanical, electrical, or

chemical, they approach more closely to the usual problems of industrial research than to those of medical science.

This shift in medicine is slowly bringing about a wedding between the industrial scientist, working with his machines and motors, and the medical scientist, more familiar with the human body.

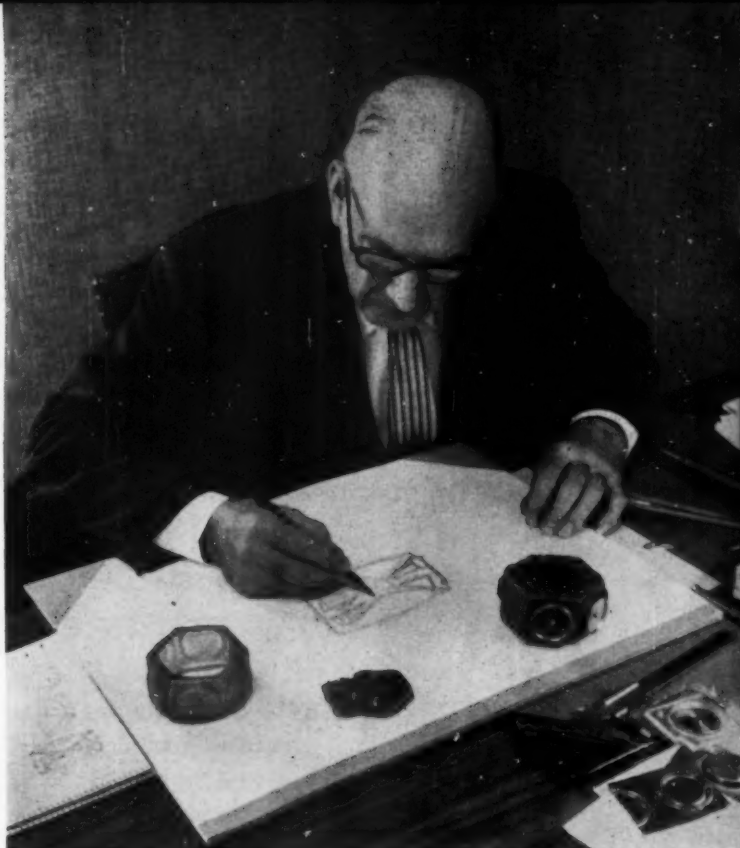
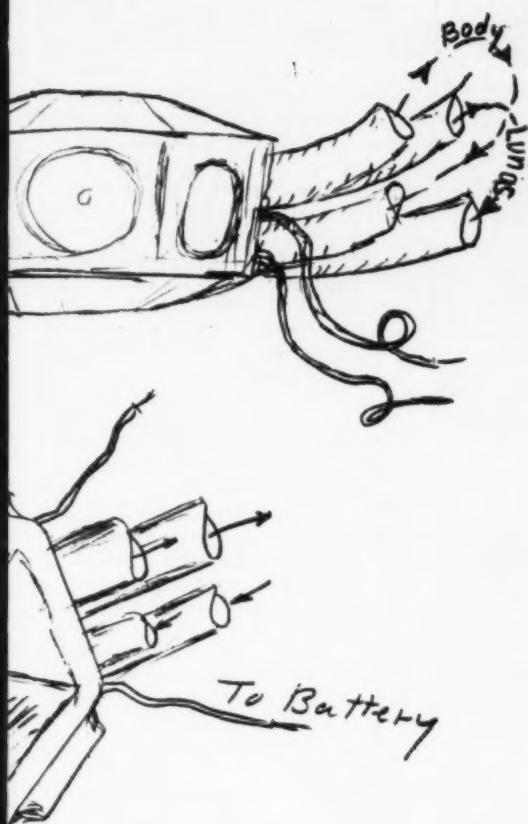
• **Call for a Helpmate**—Such a marriage of industry and medicine can be seen in a project to develop an artificial heart, now under way at the Cleveland Clinic, a private medical center in the Ohio city. Dr. Willem Kolff, head of the

Clinic's Dept. of Artificial Organs, now envisions an artificial heart that will be placed inside the body to substitute for a natural heart too damaged for surgical repair. As now conceived it would operate, roughly, along the lines depicted in the drawings above.

Before such an artificial heart can ever be placed inside a human to prolong his life, however, it is necessary to develop a mechanical or electrical pump small enough to fit the human chest cavity but strong enough to duplicate the heart's action. And that's where medicine has to call on industry for help. Development work on such a pump is being done by Thompson Products, Inc., Cleveland, and one of its retired engineers, S. Harry Norton (picture).

• **Pump Man**—Norton retired from Thompson in 1955 as chief engineer,





**DESIGNER** of pump for artificial heart—S. Harry Norton, retired Thompson Products engineer—draws the sketches shown at left. Norton, who considered medicine before he chose engineering, jumped at chance to work on heart pump when Dr. Willem Kolff of Cleveland Clinic called on Thompson Products for help in developing an artificial heart that could take the place in human body of a real one too damaged for repair.

oil transfers pressure evenly from pumps to plastic ventricles. Elastic valves regulate blood flow, and plastic sack covers pump.

## Promises an Artificial Heart

but has retained a consulting connection with the company. When Thompson was called in to help on the heart project, its director of research, Theodore R. Thoren, asked Norton if he wanted to try developing a pump to replace the human heart. Norton jumped at the idea and has been spending a large percentage of his time since January, 1957, on it.

### I. Why an Artificial Heart?

As is the case with most industrial help for medical research, however, the marriage between Thompson and the Cleveland Clinic was not an easy one for Cupid to arrange. Kolff knew early in his study what he needed, but it wasn't easy to find someone who could help solve the problem.

• **Emergency Need**—From earlier work

on the heart-lung machines now used to carry on the work of these organs temporarily, during surgery, Dr. Kolff became interested in the possibilities of permanently replacing a heart that could no longer function.

Doctors using the heart-lung machines during operations have often felt helpless as they watched a patient die when his own heart was unable to re-assume the burden of work following an otherwise successful operation.

• **First Attempt**—Kolff first worked on a heart pump with Laddie L. Hercik, former vice-president and general manager of Hill Acme Co., Cleveland machine tool manufacturer—a logical move because Hercik had previously made components for the heart-lung machines used by the clinic.

Working with Kolff and his assistant, Dr. Tetsuzo Akutsu, Hercik made a

pump that was successfully used last March to keep a dog alive for two hours after the dog's heart had been replaced with a plastic one.

This pump is too large for successful use inside the body. It did indicate, however, that the doctor and his scientific researchers were on the right track.

### II. Finding the Right Mate

Thompson Products got into the project when Kolff struck upon the idea that the fuel pump of a truck might approximate an answer to his need for a small pump with reliable, high-volume operation.

First, Kolff contacted White Motor Co. to ask advice on getting truck fuel pumps for his experiments. White furnished a couple of pumps from stock,



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and advised about other companies that might give assistance.

Stewart-Warner Corp. furnished a pump, as did the Eclipse Machine Div. of Bendix Aviation Corp. The Aviation Gas Turbine Div. of Westinghouse Electric Corp. assigned an engineer to develop a pump design that would meet the doctor's need for pumping five liters per minute—the ordinary truck pump only pumps about one liter per minute.

• **New One Needed**—Using the many standard model pumps, Kolff pumped both blood and saline solution (which approximates blood in many of its physical characteristics).

The most important thing he learned was that automotive fuel pumps work in an opposite way to the action of the human heart.

Car fuel pumps conventionally use a strong electromagnetic stroke to suck fuel into the pump. Magnets in the pump are continually charged and discharged; when they are charged, a force is exerted toward the pump, and this sucks the fuels away from the fuel tank into the pump. To get the fuel from the pump into the engine, only a weaker spring stroke is needed.

In the heart, the reverse is the case. Only a weak suction stroke is needed to get blood into the heart, but a very strong pressure stroke is required to send it out through the body.

At this point, Kolff was sure he would need to have his own design.

In seeking a laboratory to work on his problem, Kolff set two major requirements. He wanted a company experienced in pump developments, and he preferred one in Cleveland.

• **Quick Decision**—Kolff called Dr. Thoren at Thompson, and invited him to visit the clinic's laboratory. Before Thoren arrived for the appointment, Kolff prepared for a "hard sell"—medical and industrial researchers don't always speak the same language. He set up his array of pumps, connected to plastic tubes and pumping saline solution.

But Thoren was sold immediately. He approved Thompson work on the project without even consulting his superiors. The decision, he felt, was entirely within the range of the company's policy of assisting in worthwhile community projects.

The decision wasn't entirely altruistic, either. Thoren saw an opportunity for Thompson to get experience in a new field—that of medical equipment.

### III. Designing The Pump

Engineer Norton, called on to help, started with the idea of a magnetic pump—the kind used in the truck fuel pumps—but reversing the stroke. This is still the basis of the present designs, even though he has changed many parts

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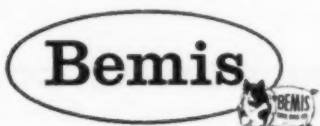


**ORCHIDS TO BEMIS** for the double protection its polyethylene-lined Multiwall Bag gives to "Orchid Bark"—used in potting delicate orchid plants. *Flexible* packaging keeps moisture in, water out . . . keeps the precisely balanced qualities of the bark in "as packed" condition. Lucky for the orchids . . . and orchid growers.



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since he began work over a year ago. The current model, for which magnets are now being made at Thompson, is the six-sided box, about 4 in. in diameter, that is shown in the drawings on pages 170-171. Five of the sides serve as supports for diaphragms and magnetic pumps. From the sixth side four tubes will protrude for connection to the main inlet and outlet tubes from the heart.

Two tubes will be connected to each of the two plastic sacks serving as ventricles—a small one to each to allow blood to flow into the artificial ventricles, and a larger one to handle the higher pressure blood as it flows from the artificial heart.

Oil will be used in the artificial heart to transfer the pressure evenly from the five pumps to the ventricle sacks. It is hoped that the oil will also help transfer heat generated by the pumps to the blood stream, so that it may be dispersed through the body.

• **Tests and Changes**—A working model of the pump as now designed is nearing completion and may be tested soon. Even if it works, however, the end of the research project is still not near.

After the working pump is successful, efforts will be made to reduce the size. The present design is still larger than the human heart it must ultimately replace if it is to perform its basic function. Norton already has ideas on decreasing the size.

• **External Power**—When the pump is developed and operating, it is still assumed that external power sources and control will be needed. Present plans picture two wires emerging from the chest cavity and connected to external transistorized controls. How big the outside package will be will depend on future battery developments, and on how long the machine must function without another source of power.

If the patient can be plugged into a source of electric current most of the time, so he will only need a short battery reserve, then the package will, of course, be small. But if he desires to go a day or two, or even longer, on battery power, the external elements will be much more cumbersome. Under any circumstances, it is unlikely that the wearer of an artificial heart will be able to move about normally.

### IV. Fringe Problems

When Norton completes a successful pump, Kolff will still have a whole family of medical problems to solve—such questions as:

What will such a machine do to the body's nervous system? Can a system be provided to increase the flow of blood when a person works? How can the artificial heart be safely and quickly attached to the arteries it serves? Will



# *Honeywell's DATAmatic 1000*

## *brings new reliability*

### *to business data processing*

Record-breaking speeds and capacity plus the flexibility to handle a wide range of business applications are the trademarks of Honeywell's extraordinary DATAmatic 1000.

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Methods men experienced in electronic data processing know that the greatest thief of time and money is the minutes or hours lost in reprocessing parts of files, necessary because of recording or reading errors. Almost every such error can be traced to imperfections in the tape recording surface, caused by wear and tear or particles of dirt.

Honeywell engineers tackled this problem from several directions. First, they developed a totally new "frequency modulation" recording technique which enables DATAmatic 1000 to read correctly even seriously weakened signals. Conventional systems would either misinterpret these signals or miss them altogether.

Secondly, they built a tape transport mechanism in which the tape is literally carried *by air* in a vacuum system. There are no pinch rollers to cause abrasion or dust embedment. The recording surface is touched only when information is electronically read or recorded.

Finally, the tape is wider and stronger. Each reel holds far more information, hence requires less handling.

Improved magnetic recording is but one of the many ways in which Honeywell engineers have achieved exceptional reliability throughout the DATAmatic 1000 System. It is further reason why consideration of any business data processing program is incomplete without the facts on DATAmatic 1000.

Our applications engineers will be glad to discuss your requirements. Write for details to Walter W. Finke, President, DATAmatic Division, Dept. B5, Newton Highlands 61, Massachusetts.



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**DATAmatic**

ELECTRONIC DATA PROCESSING®



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"I am convinced that this is the principal reason why declines in business activity are prolonged. As soon as businessmen stop looking to government to do the entire job and get back to work themselves, the storm is over."

JAMES H. McGRAW

*July, 1935*



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3. Industry is carrying out more than \$8 billion of research and development work... up 125% from 1953.
4. Capital investment per production-worker stands at a record \$16,000.
5. About \$430 billion worth of goods and services will be produced in the U. S. this year.



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the body try to reject this strange object placed inside it?

A list of the new problems is almost endless. There's a long road of research ahead before the artificial heart can be adopted for human use.

Norton, not content with the challenge of the pump itself, has already started work on some of these fringe problems. He has suggested using "quick connect" system to join the artificial heart to the arteries. He pictures the tubes protruding from the artificial organ as being covered with a series of sharp, minute spikes, like hooks on a fish line (drawings, page 170).

An artery slipped over a tube with these reversed spikes would be impaled rapidly and permanently.

Scientists at other companies have been called in to help with other problems. B. F. Goodrich Chemical Co. is working on special plastics that might be used for the ventricle sacks and as a covering for the entire pump. An external covering will be needed to keep the pump from injuring other organs.

## V. Medicine and Industry

Dr. Kolff is naturally highly pleased with the assistance he has received from industry. He is hopeful that this will lead to greater assistance from many other companies for his work and that of other doctors in similar projects—for, he says, "there is much more they can do." There is a tremendous potential—both financially and developmentally—in the merger of the interests of medicine and industry.

Other leading medical researchers have expressed the opinion that the block to greater help from industry is the lack of better communication between the medical researcher and the industrial scientist. Not every medical researcher has the sales ability and foresight of Kolff, and not every one is able to call in an industry director of research and show him an experiment that immediately wins his approval.

A few companies, such as Dow Corning Corp., have a man assigned full time to help the medical profession in its research problems. But others often refer medical scientists to their medical departments—and "when that happens," says Kolff, "it's a sure way to the demise of the project."

Industrial scientists working on Kolff's artificial heart will be able to allay any fears that medical research will be difficult for industrial research scientists "to stomach." John D. Grigsby, a design engineer and physicist for Thompson, who is working on the magnet design for Norton's heart pump, gives a typical reaction. According to Grigsby, "the project caused a first shock," but "after you get over that, it's just another problem." **END**



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## Facing New Tests Abroad

This week U.S. foreign policy is being severely tested in three areas—by the mob attack on Vice-President Nixon in Caracas, by the insurrection in Lebanon against the pro-Western government, and by the threat to democratic government in France that is coming from the French army in Algiers. Washington clearly faces some tough decisions about American policies in Latin America, in the Middle East, and in the French-Algerian dispute (page 38).

In addition, Washington also faces a new situation with respect to summit negotiations with Moscow. For in Caracas and Lebanon there is ample evidence of Soviet intervention—in an effort to expose American weakness and thus drive us to accept a summit meeting on Soviet terms.

Given this new tough Soviet policy, it is fortunate that the Atlantic Alliance has just closed ranks on the summit issue, thanks largely to Washington's stubborn refusal to be stampeded into a summit meeting. That fact was demonstrated last week at a meeting of the NATO Council in Copenhagen. At this session all the NATO governments stood firmly with the U.S. in a hardheaded approach to the summit. The West would welcome such a conference, said the NATO communique—but only if Moscow is ready for genuine negotiations on the basic issues dividing East and West.

At the moment when NATO was taking this stand, there were signs of dissension in the Communist camp. On the one hand, an open split developed between the Kremlin and the Tito government of Yugoslavia. On the other hand, there were reports that Nikita Khrushchev's personal position might not be so strong as it looked two months ago.

Whatever the outcome of these latest developments behind the Iron Curtain (and of Moscow's intervention in Venezuela and Lebanon), they surely demonstrate one thing that we and our allies should never forget—the importance of holding to our principles, regardless of the winds that blow from the East. There have been strong voices raised in the West for making a deal with the Kremlin at almost any price. We must do this, the argument goes, lest Khrushchev's peaceful coexistence policy be replaced by a new version of Stalinism. This is outright appeasement, of course. And it would afford no guarantee whatsoever either that Khrushchev would stay in power or that, if he did, his future policies would be reasonable.

The only sensible course for the West is to stick by its guns on basic issues such as arms control and German reunification. We can't sweep these issues under the rug to achieve a momentary glow in East-West relations. To do so would be simply to encourage the further expansion of Communism.

This is the position that Secretary of State Dulles has taken—in the face of strong European criticism—ever since Moscow started beating the drums for a summit conference. Now Dulles has the satisfaction of knowing that his European colleagues concede that he has been right.

This vindication of Dulles can be attributed partly to the clumsy way in which Moscow rejected the U.S. appeal to the United Nations for an Arctic inspection zone. But even more it is due to Dulles' determination not to be stampeded. He has consistently taken the position that real security for the U.S. and its allies can be achieved only if we stand firm on principle and back up that stand with the kind of military strength that Moscow respects.

## Cry for Help

For almost a year now, spokesmen for the railroad industry have been warning Congress that they were headed full throttle for financial disaster. Last week, the warnings took on a note of deadly seriousness that carries even more conviction than panic.

Pres. Patrick McGinnis of the Boston & Maine told a Congressional committee: "I speak for seven shaky railroads, and I can tell you that unless we get aid from Congress—this year, not next—we will go under."

Looking back over the sad history of the rails in the past 30 years, it is easy to see the things that should have been done to avoid this crisis. There is blame to spare for rail management, for the government, and for the public.

Looking ahead, it is a good deal harder to see what can and should be done now.

One thing is clear, however: The shaky roads must not be forced to go through the bankruptcy wringer to get the relief they need. It would be outright folly to risk at this moment the shock to all business that a succession of rail bankruptcies would produce.

There is only one thing to do now and that is to throw the strength of the federal government's credit behind the tottering roads. This could be done either by guaranteeing loans to them, or—perhaps more efficiently—by establishing a new version of the old Reconstruction Finance Corp. to make outright advances to them.

In other words, what we need now is a rescue operation, pure and simple. Then, after the rescue, we will have to face the fact that the country needs a complete overhaul of its basic transportation policy. That won't be an easy task, but it will be far easier if it is not complicated by having some of the nation's key roads plunged into bankruptcy.



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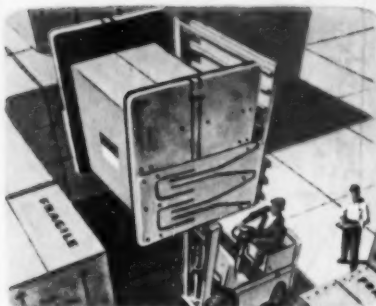
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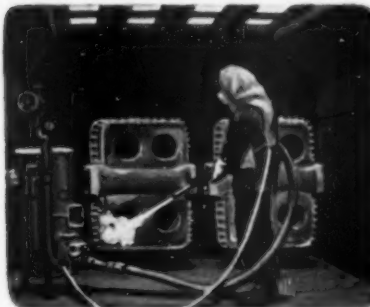
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